Richard Gates
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VIA ELECTRONIC MAIL

July 21, 2016

Erich Weissbart, P.G.
EPA Region 3
Land and Chemicals Division
701 Mapes Road
Fort Meade, MD 20755

Subject: **Semi-Annual Project Progress Report: January-June 2016**
RCRA Corrective Action Permit MDD046279311
Former Appliance Park East Facility
Columbia, Maryland

Dear Mr. Weissbart:

Please find attached the Semi-Annual Project Progress Report for the former Appliance Park East facility in Columbia, Maryland. This report covers the period from January 1 to June 30, 2016, and is submitted by the General Electric Company (GE) pursuant to Condition II.C of the above-referenced permit, as modified by the United States Environmental Protection Agency (EPA).

As required by Condition I.B.9 of the above-referenced permit, I certify under penalty of law that the enclosed report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Please contact me or Belssi Chang Lee of Tetra Tech at (410) 990-4607 if you have any questions regarding the attached report.

Sincerely,

Richard Gates
Senior Project Manager – Remediation

Attachment

cc: Belssi Chang Lee, Tetra Tech (via email)
Ed Hammerberg, MDE (via email)
Curt Lebak, RREEF (via email)
Bob Jenkins, Howard Hughes Corporation (via email)

SEMI-ANNUAL PROJECT PROGRESS REPORT

RCRA CORRECTIVE ACTION PERMIT (PERMIT)

Permittee: General Electric Company (GE)

Permit Number: MDD046279311

Prepared for GE Global Operations – Environmental Remediation
159 Plastics Avenue
Pittsfield, Massachusetts 01201

Prepared By: Tetra Tech, Inc. (Tetra Tech)
51 Franklin Street, Suite 400
Annapolis, Maryland 21401

Date: July 21, 2016

Report Period: January 1, 2016 to June 30, 2015

Copies: Maryland Department of the Environment (MDE)
RREEF Engineering
The Howard Hughes Corporation

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1. Progress Made This Period

Underground Storage Tank (UST) No. 9 - CMS Unit 4

The most recent post-termination groundwater monitoring event was performed in October 2014; the report (Tetra Tech, 2014) was previously submitted to EPA. Attachment 1 includes a summary of the results. ERM-6 was the only well out of 10 wells sampled that had detections: 4.6 µg/L toluene, 167 µg/L ethylbenzene, and 368 µg/L xylenes; benzene and MTBE were not detected (<1.0 µg/L). The results are below the groundwater clean-up goals specified in the 2013 Post-Termination Sampling and Analysis Plan (SAP) and one or two orders of magnitude lower than the ERM-6 concentrations initially measured in November 1996:

	Well ERM-6 Concentrations (µg/L)		
	Initial	***Most Recent***	
Compound	***November 1996***	***October 2014***	***Cleanup Goal***
Benzene	760	<1	5
Toluene	6,600	4.6	1,000
Ethylbenzene	1,400	167	700
Xylenes	5,800	368	10,000
MTBE	1,100	<1	20

The next biennial sampling event is scheduled for October/November 2016. Should the results be similar to the 2014 results, GE may perform final verification sampling in accordance with the 2013 Post-Termination SAP to verify attainment of the clean-up goals and request EPA approval to discontinue the post-termination monitoring.

Volatile Organic Compounds (VOCs) in Soil and Groundwater Beneath and Around the Former Manufacturing Building - RCRA Facility Investigation (RFI) Unit 2

The Parcel A-10 pump-and-treat system was fully operational over the last six months except in April 2016 and as noted in the monthly monitoring reports submitted to the United States Environmental Protection Agency (EPA) for this reporting period (i.e., January through June 2016). Attachment 2 includes summary tables and figures showing the site plan and performance monitoring results for the pump-and-treat system. On April 7, 2016 the system was shut down due to a leak on the edge of the top manhole of the granular activated-carbon (GAC) vessel. Normal system operation resumed on April 28, 2016 after replacement of the GAC vessel with a new unit filled with fresh carbon. Following waste characterization, the spent carbon was shipped on June 1, 2016 to the carbon vendor for regeneration.

A groundwater monitoring event was conducted in May 2016 in accordance with the approved SAP dated May 4, 2011; the report (Tetra Tech, 2016) was previously submitted to EPA. Attachment 2 includes a summary of the results including groundwater elevation data, groundwater elevation contour maps for the saprolite and bedrock units, and summary of analytical results. The groundwater samples were collected using passive diffusion bags (PDBs). Tetra Tech deployed the (PDBs) on May 13, 2016 and retrieved them on May 27, 2016 to collect the groundwater samples. The samples were analyzed for volatile organic compounds (VOCs) by EPA Method 8260. The groundwater analytical results are summarized in Table 2; Table 3 presents trichloroethene (TCE) results since June 2007. Figures 9 and 10 illustrate the change in TCE concentrations since June 2000 at wells located within the plume core and at wells located at the plume toe and cross-gradient of the plume, respectively[i]. The groundwater elevation and sample results from the May 2016 sampling event show that the hydraulic containment system continues to operate as intended. Specifically, VOC-impacted groundwater continues to be contained on Parcel A-10.

The Phase II soil vapor extraction (SVE) system was fully operational over the last six months except as noted in the monthly field logs submitted to EPA for this reporting period (i.e., January through June 2016). Attachment 3 includes a site plan for the Phase II SVE system, a plot showing the cumulative VOC mass removed by the system through time, and a flow chart that shows how the system is progressing through the termination criteria specified in the system's updated operation and maintenance manual submitted to EPA in June 2011.

[i] Abnormalities in the trends shown on Figure 9 (2MW-11) and Figure 10 (S-2, S-4, 2MW-4) are due to non-detect results, which are considered to be anomalous based on the analytical results from subsequent sampling events.

During the reporting period, termination testing for SVE wells TVE-1S, TVE-1D, TVE-11D, and TVE-12D continued. As indicated in the previous progress report, the "test wells" were first shut down on July 24, 2015. Subsequently, per the termination criteria outlined in the flow chart in Attachment 3, the test wells were turned on for approximately one hour on August 14, September 17, and December 18, 2015, and March 18 and June 10, 2016 to take photo-ionization (PID) readings. The PID readings measured (0 to 5 parts per million [ppm]) were less than ten percent (<10%) of the original concentrations ("concentration criteria"). Therefore, test wells TVE-1S, TVE-1D, TVE-11D, and TVE-12D have met the termination criteria and will remain off. Termination testing is planned for PMVE-2 and PMVE-4 in the Press Pit in the second half of 2016 as these wells meet the criteria to start shutdown testing. The SVE system will continue to operate with the other SVE wells in the Press Pit.

Warehouse Building Oil/Water Separator and Acid Neutralization Units - RFI Unit 6

The next sampling event will be conducted in November 2017. The most recent monitoring event under the EPA-approved August 19, 2002 SAP was performed on November 29, 2012; groundwater samples were collected from monitoring wells 6MW-1, 6MW-2, 6MW-3, and OBG-65. The groundwater monitoring results were presented in a summary report (ERM, 2012) that was previously submitted to EPA. Attachment 4 includes a summary of the groundwater monitoring results including groundwater levels and the respective groundwater elevations (Table 1) and summary of analytical results (Table 2). VOCs were not detected in any of the groundwater samples except for 6MW-2, which is located at the former oil/water separator under the building. The groundwater elevation data and sample results show that the extent of VOC-affected groundwater remains within the footprint of the Warehouse Building.

Other Activities Conducted Pursuant to the Permit

The new RCRA Corrective Action Permit was issued by EPA for the facility with an effective date of November 3, 2012. In accordance with Part II.B.3 of the Permit, GE submitted an Institutional Control Plan (IC Plan) dated January 24, 2013 to EPA. By its email to GE, EPA approved the IC Plan on February 5, 2013. EPA approved the environmental covenants (ECs) for each of the properties subject to the IC Plan previously however, following submittal of the signed ECs for parcels A-8, A-10 and A-15, MDE and EPA requested that the EC template be revised. An EC has been executed and recorded for Parcel A-8. Based on discussions between GE and EPA, is GE's understanding that EPA is drafting revised ECs for the remaining parcels.

2. Problems Encountered During This Period

As indicated previously, the pump-and-treat system was down for most of April 2016 due to a leak on the edge of the top manhole of the GAC vessel. Aside from this system shutdown, the pump-and-treat system and Phase II SVE systems were fully operational over the last six months except as noted in the monthly monitoring reports and inspection logs previously provided to EPA.

3. Projected Work for the Next Reporting Period

UST No. 9 - CMS Unit 4

This next scheduled monitoring event is October/November 2016.

VOCs in Soil and Groundwater Beneath and Around the Former Manufacturing Building - RFI Unit 2

The Parcel A-10 pump-and-treat system is expected to operate at full-scale through the next reporting period, with the exception of the operation of recovery well B-3 (which will be sampled again in September 2016 to monitor for rebound in VOC concentrations). The next groundwater monitoring event will be conducted in October/November 2016 in accordance with the SAP. Groundwater monitoring will include the monitoring wells on a semi-annual, annual, and biennial sampling frequency.

The Phase II SVE system is expected to operate at full-scale through the next reporting period. Currently, there are no plans to shut down the SVE system in 2016.

Warehouse Building Oil/Water Separator and Acid Neutralization Units - RFI Unit 6

The next monitoring event is scheduled for October/November 2017.

Other Activities Conducted Pursuant to the Permit

As stated previously, GE is continuing work towards finalizing the ECs for each of the properties subject to the IC Plan. Once the ECs have been executed by all appropriate parties, the ECs will be recorded with the Howard County Land Records.

References

Environmental Resources Management (ERM), 2012. *Analytical Results for Ground Water Sampling at RFI Unit 6 Former Appliance Park East Facility, Columbia, Maryland, RCRA Corrective Action Permit MDD046279311*. December 27, 2012.

Tetra Tech, Inc. (Tetra Tech) 2014. *Biennial Groundwater Sampling and Analyses for Underground Storage Tank (UST) No. 9. RCRA Corrective Action Permit MDD046279311, Former Appliance Park East Facility, Columbia, MD*. November 25, 2014.

Tetra Tech, 2016. *Semi-Annual Groundwater Monitoring Report, May 2016 Sampling Event, RCRA Corrective Action Permit MDD046279311, CMS Units 2 and 7, Former Appliance Park East Facility, Columbia, Maryland*. June 30, 2016.

ATTACHMENT 1

To Semi-Annual Project Progress Report
RCRA Corrective Action Permit
No. MDD046279311

General Electric Co.
Former Appliance Park East Facility
Columbia, MD

Period 1 January 2016 to 30 June 2016

Findings Summary for Underground Storage Tank (UST) No. 9 - CMS Unit 4

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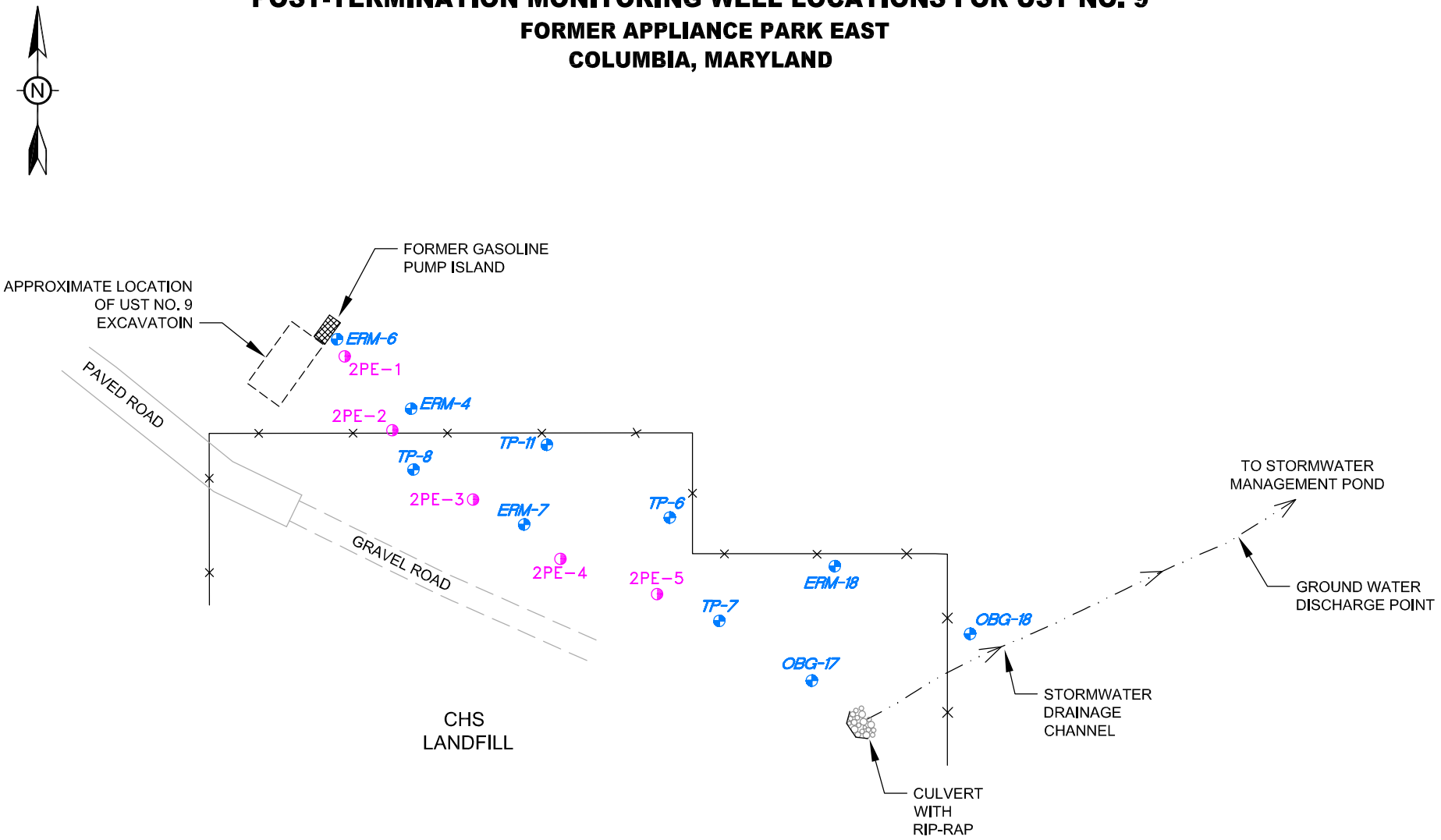
FIGURE 1
POST-TERMINATION MONITORING WELL LOCATIONS FOR UST NO. 9
FORMER APPLIANCE PARK EAST
COLUMBIA, MARYLAND



LEGEND

2PE-1 2-PHASE WELL LOCATION

ERM-4 POST-TERMINATION MONITORING WELL LOCATION

FENCE

0 100 200

SCALE IN FEET

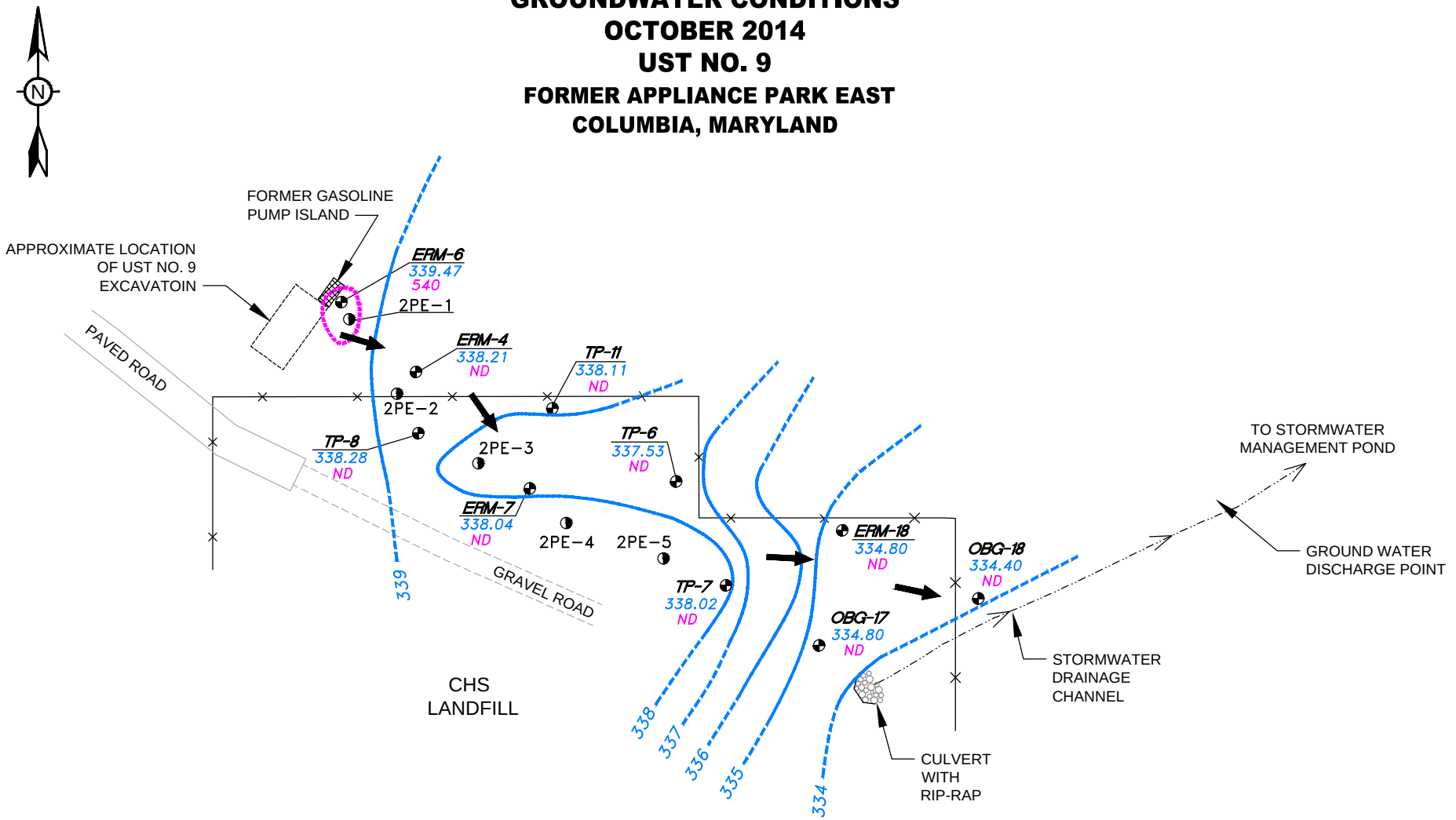
BASE MAP SOURCE:

ERM, INC., DECEMBER 2012 REPORT

TETRA TECH

2204275015A.DWG

FIGURE 2
GROUNDWATER CONDITIONS
OCTOBER 2014
UST NO. 9
FORMER APPLIANCE PARK EAST
COLUMBIA, MARYLAND



LEGEND

2PE-1	2-PHASE WELL LOCATION
ERM-4	POST-TERMINATION MONITORING WELL LOCATION
×—×—×	FENCE
338.07	GROUNDWATER ELEVATION (FEET)
338	GROUNDWATER ELEVATION CONTOUR (FEET) (DASHED WHERE INFERRED)
→	GROUNDWATER FLOW DIRECTION
540	TOTAL BTEXT CONCENTRATION (ug/L) 0CTOBER 2014
- - - - -	APPROXIMATE TOTAL BTEX 5.0 ug/L
ND	NON-DETECT

0 100 200

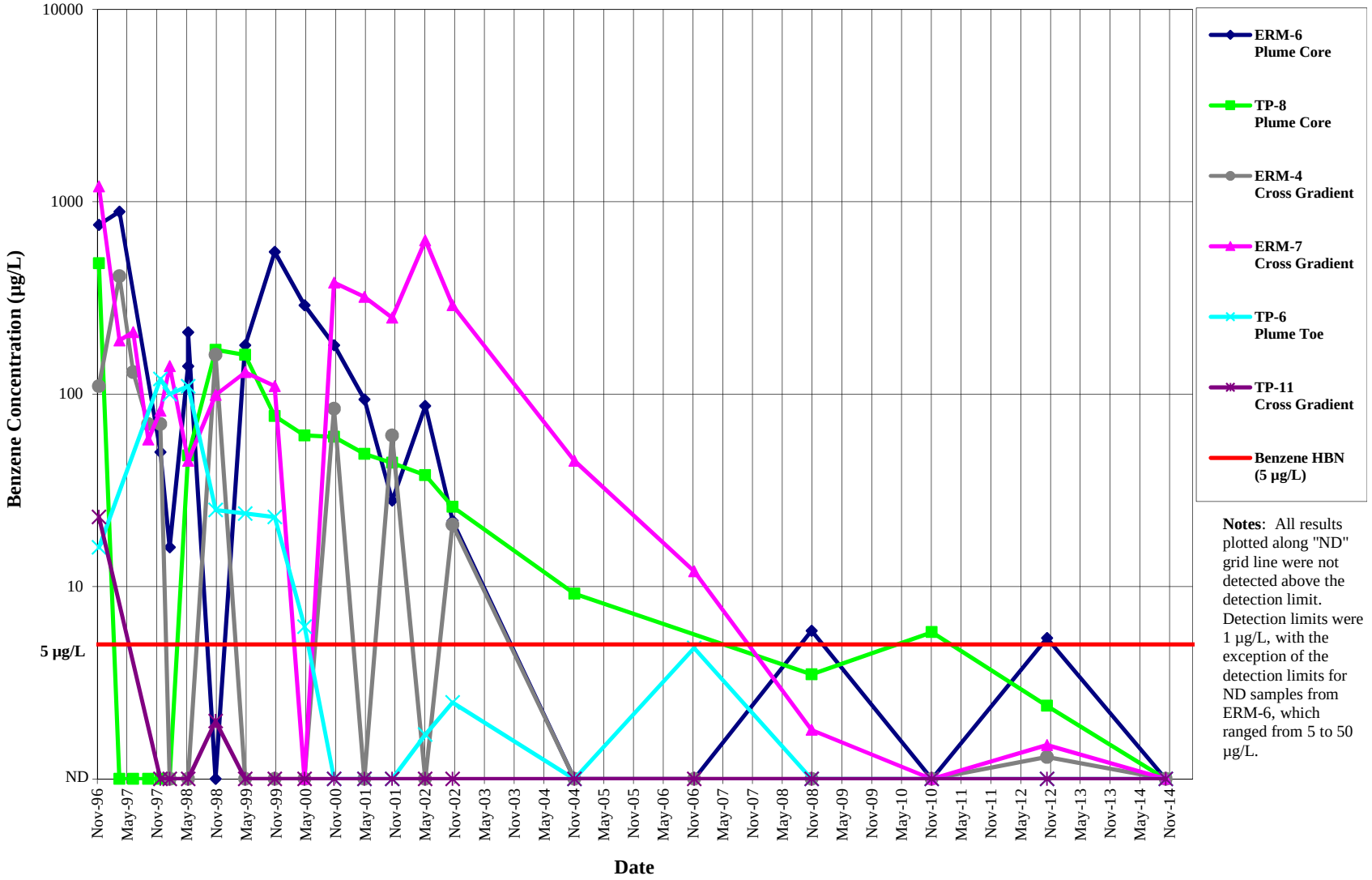
SCALE IN FEET

BASE MAP SOURCE:

ERM, INC., DECEMBER 2012 REPORT

TETRA TECH

Figure 3
Benzene Concentrations
UST No. 9
Former Appliance Park East Facility
Columbia, Maryland



Notes: All results plotted along "ND" grid line were not detected above the detection limit. Detection limits were 1 µg/L, with the exception of the detection limits for ND samples from ERM-6, which ranged from 5 to 50 µg/L.

Table 1
Summary of Ground Water Elevations in Monitoring Wells at UST No. 9
Former Appliance Park East Facility, Columbia, Maryland
October 2014

Well ID	Reference Elevation (feet msl)	Re-Survey Reference Elevation [a], [b] (feet msl)	10/23/2012		10/22/2014 [c]	
			Depth to Ground Water (feet bre)	Ground Water Elevation (feet msl)	Depth to Ground Water (feet bre)	Ground Water Elevation (feet msl)
ERM-4	359.96	--	22.67	337.29	21.75	338.21
ERM-6	360.62	--	23.06	337.56	21.15	339.47
ERM-7	366.30	--	29.17	337.13	28.26	338.04
ERM-18	351.10	--	17.40	333.70	16.30	334.80
TP-6	359.18	--	22.56	336.62	21.65	337.53
TP-7	360.60	360.83	23.47	337.36	22.81	338.02
TP-8	362.14	361.82	24.48	337.34	23.54	338.28
TP-11	364.51	--	27.31	337.20	26.40	338.11
OBG-17	351.96	--	18.23	333.73	17.16	334.80
OBG-18	349.14	--	15.96	333.18	14.74	334.40

Notes:
feet msl - feet above mean sea level
feet bre - feet below reference elevation
(a) The stickup for TP-7 was damaged during site maintenance. It has been repaired and re-surveyed. The correct survey elevation is 360.83 feet msl as of October 2000.
(b) The stickup for TP-8 was damaged during site maintenance in October 2006. It was been repaired and re-surveyed in February 2007. The elevation is 361.82 feet msl.
(c) ERM-4 could not be gauged on 10/22/2014 as the manhole cover was under 6 inches of rainwater. The well was gauged on 10/30/2014.
NM - Not Measured

Table 2
Summary of Analytical Results for Ground Water Samples at UST No. 9
Former Appliance Park East Facility, Columbia, Maryland
October 2014

Well ID	ERM-4	ERM-6	ERM-7	ERM-18	TP-6	TP-7 (a)	TP-8	TP-11	OBG-17	OBG-18
Analytes (ug/L)	**10/30/14**	**10/22/14**	**10/22/14**	**10/22/14**	**10/22/14**	**10/22/14**	**10/22/14**	**10/22/14**	**10/22/14**	**10/22/14**
Benzene	<1	<1	<1	<1	<1	<1<1	<1	<1	<1	<1
Toluene	<1	**4.6**	<1	<1	<1	<1/<1	<1	<1	<1	<1
Ethylbenzene	<1	**167**	<1	<1	<1	<1/<1	<1	<1	<1	<1
Xylene	<3	**368**	<3	<3	<3	<3/<3	<3	<3	<3	<3
MTBE	<1	<1	<1	<1	<1	<1/<1	<1	<1	<1	<1
Field Measurements										
pH (standard units)	5.08	6.44	5.11	5.46	4.91	4.96	5.54	5.18	6.09	6.33
Conductivity*	200	312	128	193	284	77	226	255	839	284
Temperature (Celsius)	14.28	15.36	13.64	15.69	13.15	14.12	13.83	13.0	14.99	16.56

Notes:
ug/L - micrograms per liter
MTBE - Methyl tertiary-butyl ether
* micromhos per second
< signifies not detected at the detection limit
(a) TP-170 is a blind field duplicate of TP-7
MCLs - Benzene 5 ug/L; Ethylbenzene 700 ug/L; Toluene 1,000 ug/L; Xylenes 10,000 ug/L.
Analyses performed by Pace Analytical Services, Inc. by EPA Method SW 846-8260 starting in 2014. Analyses prior to 2014 performed by Lancaster Laboratories, Inc. using EPA Method SW 846-8021B.
ERM-4 sampled on 10/30/14 and not on10/22/14 when the other UST-9 monitoring wells were sampled due to its manhole cover being under 6 inches of rainwater on 10/22/14.

ATTACHMENT 2

To Semi-Annual Project Progress Report
RCRA Corrective Action Permit
No. MDD046279311

General Electric Co.
Former Appliance Park East Facility
Columbia, MD

Period 1 January 2016 to 30 June 2016

Findings Summary for Groundwater for RFI Units 2 and 7

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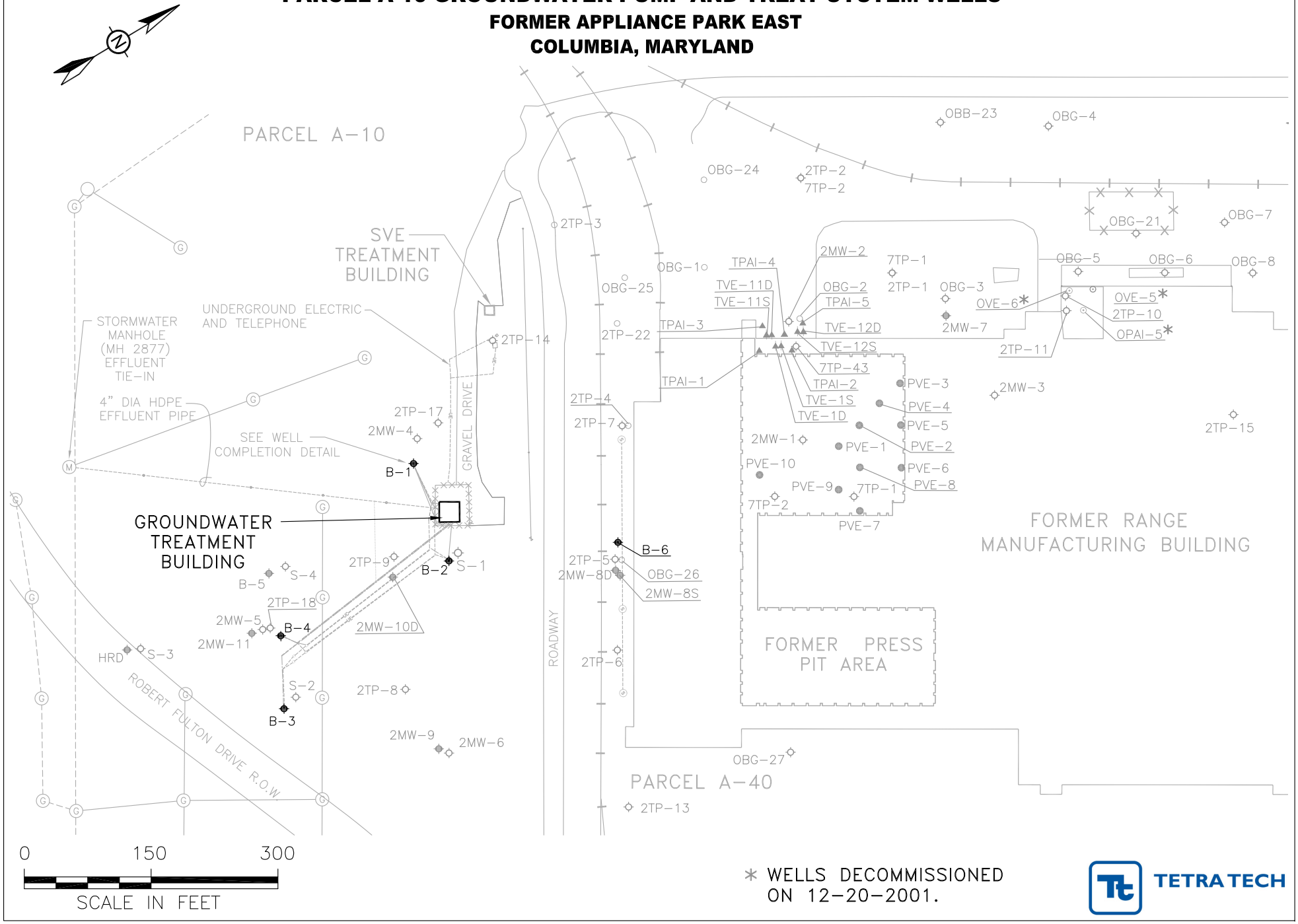
FIGURE 1
PARCEL A-10 GROUNDWATER PUMP AND TREAT SYSTEM WELLS
FORMER APPLIANCE PARK EAST
COLUMBIA, MARYLAND



* WELLS DECOMMISSIONED ON 12-20-2001.

TETRA TECH

Figure 2
Groundwater Pump-and-Treat System Recovery
Former Appliance Park East Facility, Columbia, Maryland

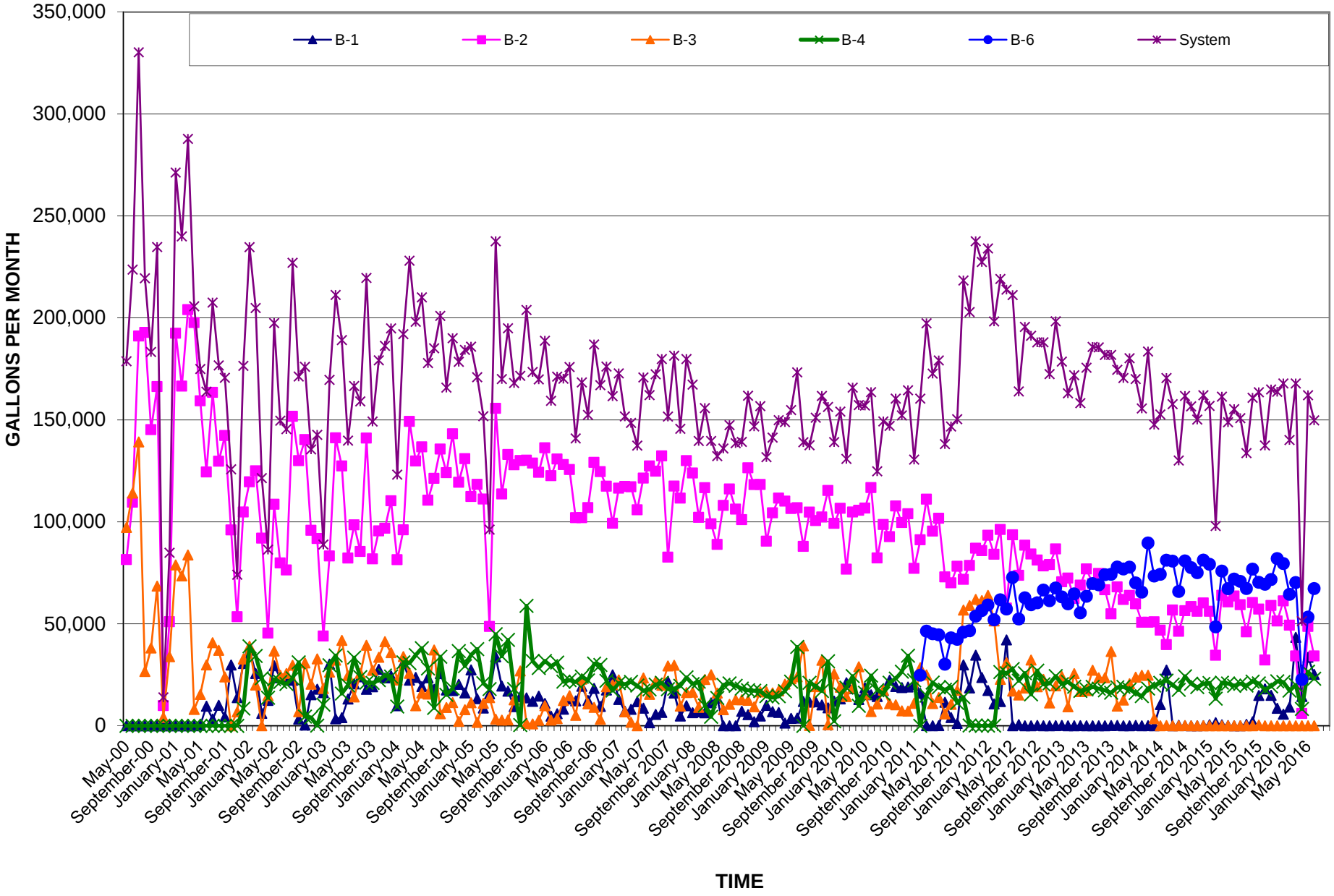


Figure 3
Groundwater Pump-and-Treat System Recovery - Trailing 12-Month Total Gallons
Former Appliance Park East Facility, Columbia, Maryland

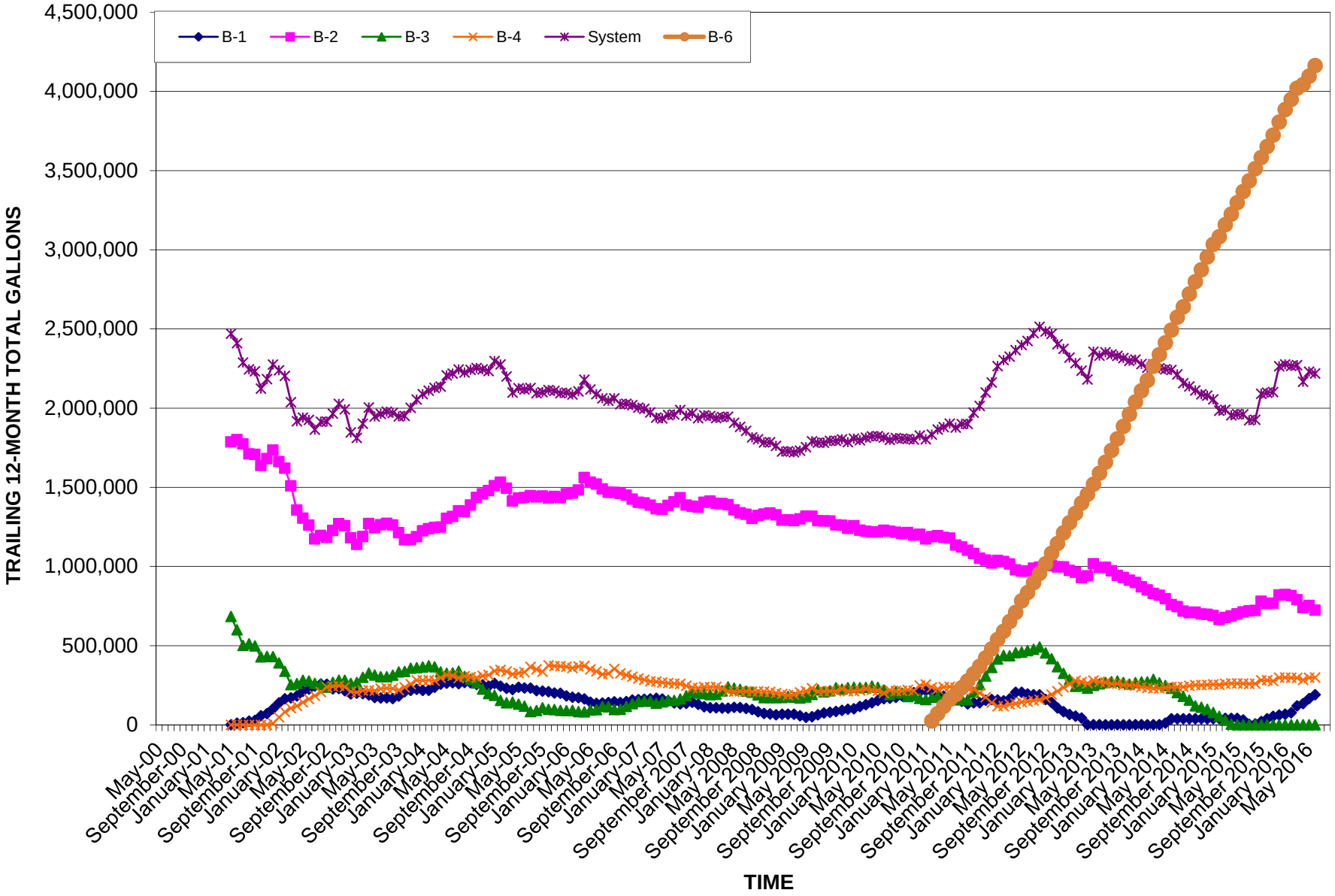
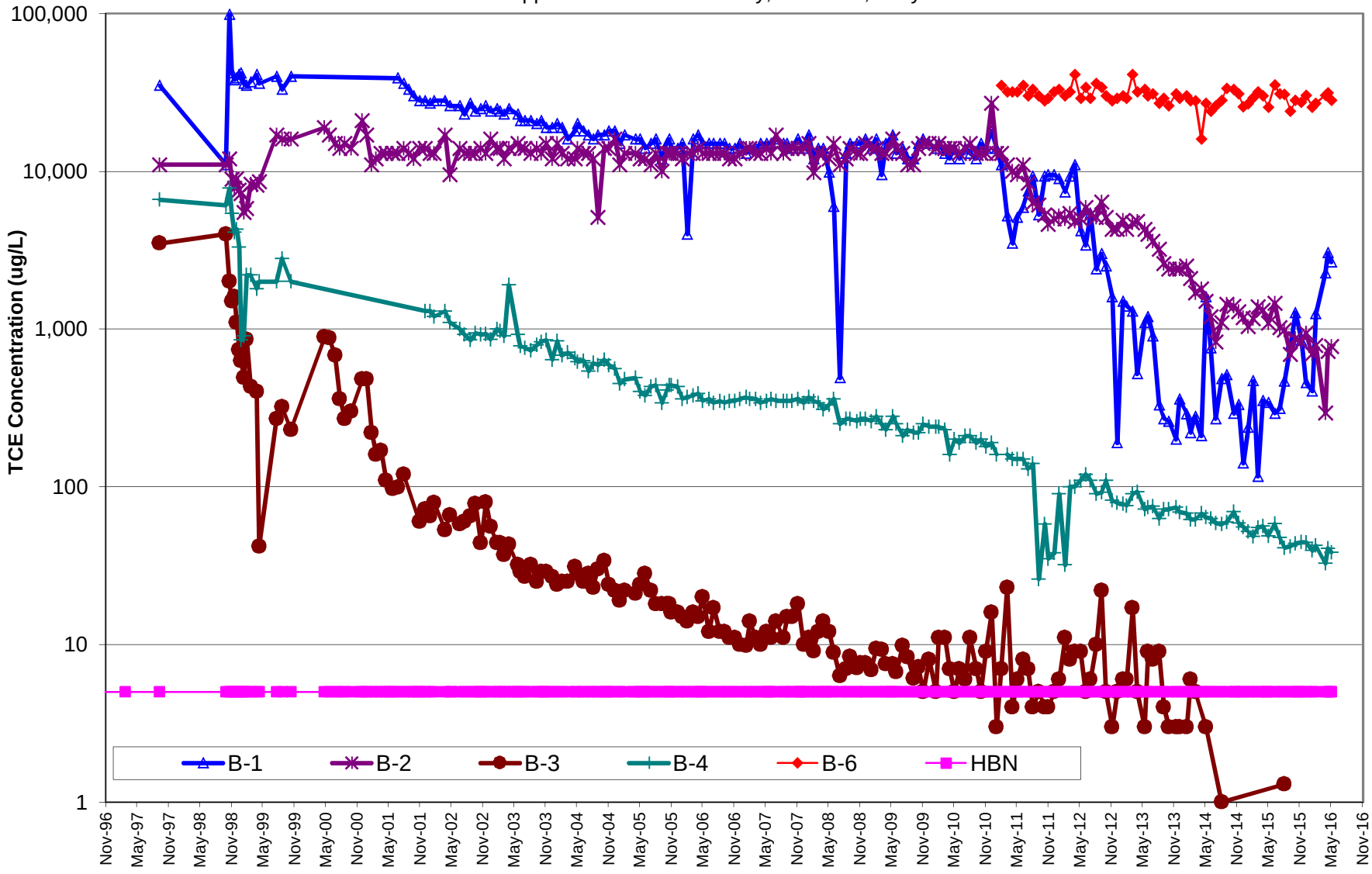


Figure 4
TCE Concentrations in Groundwater Recovery Wells
Former Appliance Park East Facility, Columbia, Maryland



HBN: Permit-Specified Health Based Number

FIGURE 5
GROUNDWATER MONITORING WELLS
PARCELS A-10 AND A-40
FORMER APPLIANCE PARK EAST
COLUMBIA, MARYLAND

Parcel A-43

Parcel A-10

Parcel A-40

Asphalt Road

2TP-16 S.D. 2MH-2 S.D. 2MH-3 2MH-19 Fire 2MH-10 OBG-23 OBG-4 2MH-12 2MH-20 OBG-9 2MH-14 OBG-54 OBG-55 SD1

OBG-24 2TP-2 2TP-3 2MH-4 OBG-1 OBG-25 2MH-5 2TP-22 2TP-14 2TP-1 S.D. Fire

SVE TREATMENT BUILDING

ODSR AREA OBG-7 2MH-13

2MW-13 2MW-12 TPAI-4 ETT AREA TPAI-3 TVE-11S TPAI-5 TVE-12D TVE-12S 7TP-43 TPAI-1 TVE-11D TPAI-2 TVE-1S TVE-1D

OVE-6 2TP-10 2TP-11 OVE-5 OPAI-5 ODSR

PRESS PIT AREA (WEST WING)

RANGE BUILDING

2TP-17 2MW-4 B-1 PARCEL A-10 PUMP AND TREAT REMEDIATION COMPOUND 2TP-7 2MH-17 2TP-4 7TP-2 7TP-1 2MH-6 2TP-5 OBG-26 2MW-8D 2MW-8S 2TP-6

2TP-9 S-1 B-2 2MW-10D S-4 B-5 2MW-5 2TP-18 B-4 2MW-11 HRD-1 S-3 S-2 B-3 2TP-8 2MH-7 2MW-9 2MW-6 2MH-18 2TP-13

PRESS PIT AREA (EAST WING)

NEW ADDITION

ROBERT FULTON DRIVE

S.D. Fire

LEGEND

EXISTING FEATURES

- SAPROLITE MONITORING WELL LOCATION
- BEDROCK MONITORING WELL LOCATION
- UTILITY BACKFILL MONITORING WELL LOCATION
- COASTAL PLAIN/PERCHED MONITORING WELL LOCATION
- STORM DRAIN MANHOLE
- ODSR FORMER OIL DRUM STORAGE ROOM
- UTILITY LINES - FIRE AND STORM DRAIN
- UTILITY LINES - ABANDONED
- ETT FORMER EXTERIOR TCE TANK AREA
- TVE, OVE - VAPOR EXTRACTION WELLS
- TPAI, OPAI - AIR INLET WELLS
- MONITORING WELLS TO BE SAMPLED ANNUALLY AND WATER LEVELS MONITORED SEMI-ANNUALLY
- MONITORING WELLS TO BE SAMPLED SEMI-ANNUALLY AND WATER LEVELS MONITORED SEMI-ANNUALLY
- MONITORING WELLS TO BE SAMPLED BIENNALLY AND WATER LEVELS MONITORED SEMI-ANNUALLY
- 2TP-17 IS MONITORED ONLY FOR WATER LEVELS SEMI-ANNUALLY

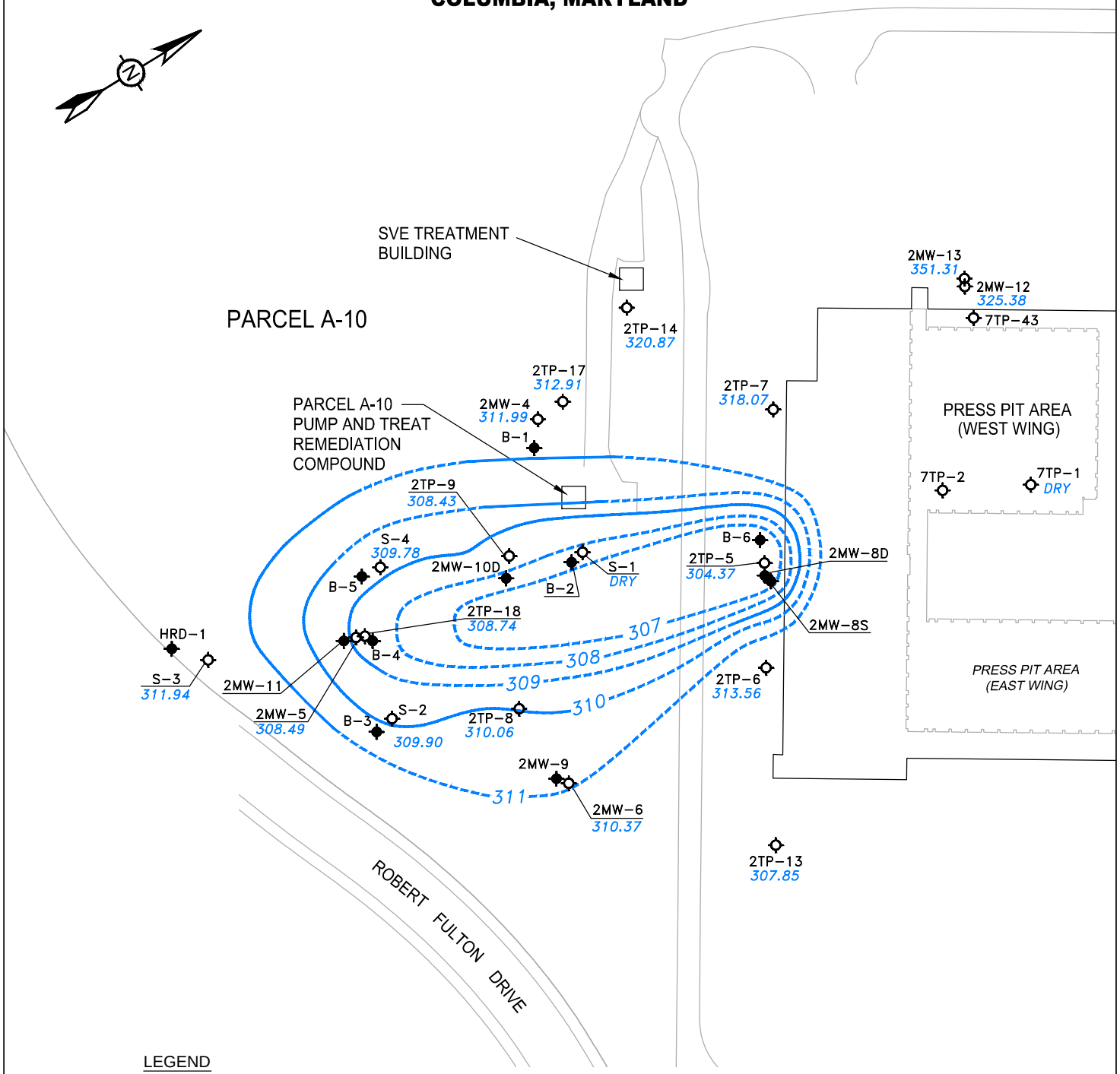
0 150 300

SCALE IN FEET

TETRA TECH

220427S0144.DWG

FIGURE 6
HYDRAULIC HEADS FOR PARCEL A-10 SAPROLITE WELLS
MAY 13, 2016
FORMER APPLIANCE PARK EAST
COLUMBIA, MARYLAND



LEGEND

- SAPROLITE MONITORING WELL LOCATION
- BEDROCK MONITORING WELL LOCATION
- 310.37 GROUNDWATER ELEVATION (FEET)
- 309 GROUNDWATER ELEVATION CONTOUR (FEET) (DASHED WHERE INFERRED)

NOTES:

1. 2MW-13 IS A COASTAL PLAIN/PERCHED GROUNDWATER MONITORING WELL.
2. GROUNDWATER ELEVATIONS FOR 2MW-5 AND 2TP-13 WERE NOT USED TO DEVELOP GROUNDWATER ELEVATION CONTOURS.

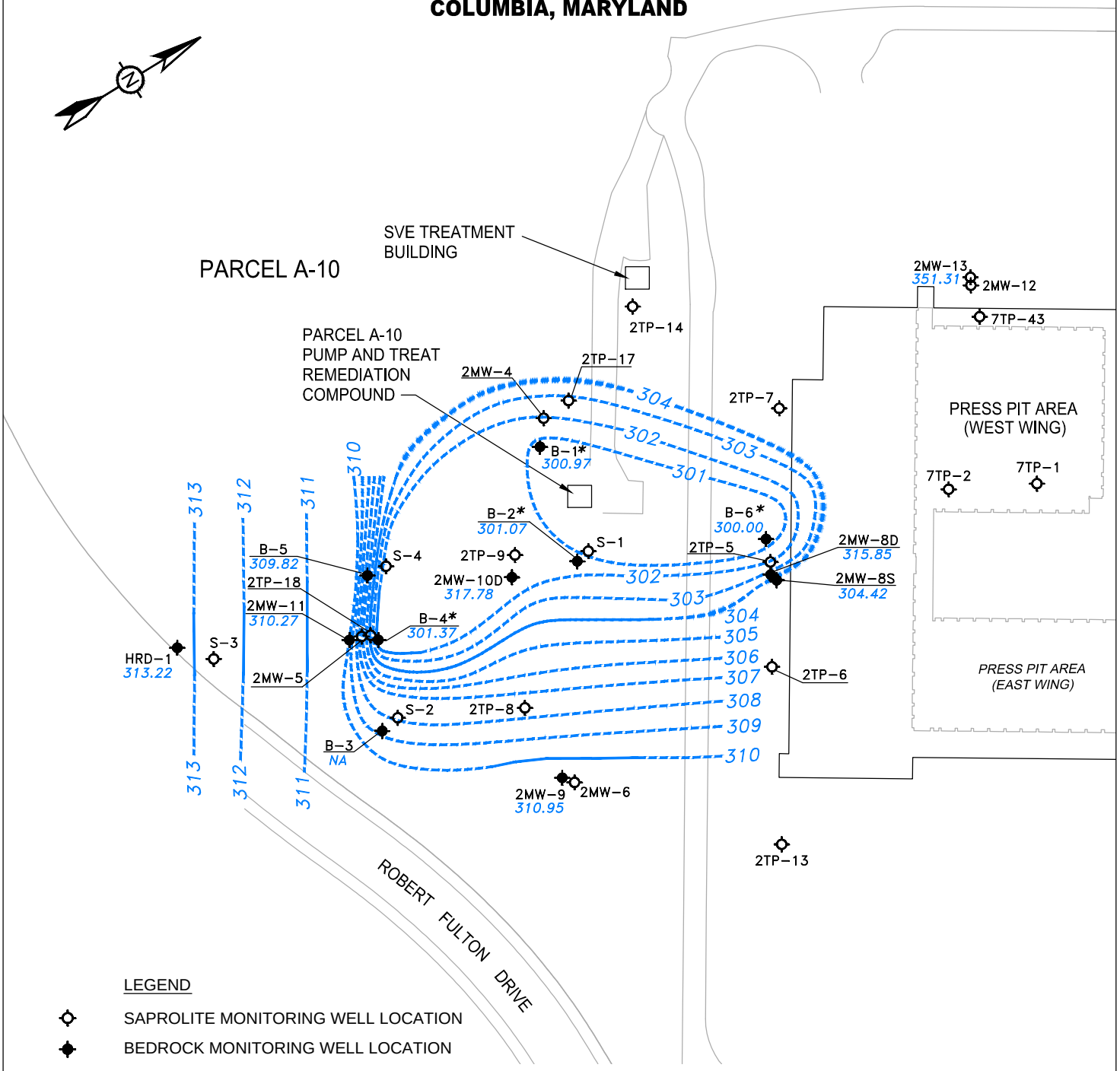
0 150 300

SCALE IN FEET

TETRA TECH

2204275030A.DWG

FIGURE 7
HYDRAULIC HEADS FOR PARCEL A-10 BEDROCK WELLS
MAY 13, 2016
FORMER APPLIANCE PARK EAST
COLUMBIA, MARYLAND



LEGEND

- SAPROLITE MONITORING WELL LOCATION
- BEDROCK MONITORING WELL LOCATION
- 310.95 — GROUNDWATER ELEVATION (FEET)
- 309 — GROUNDWATER ELEVATION CONTOUR (FEET) (DASHED WHERE INFERRED)
- * — HYDRAULIC HEAD IS THE LOWER SET POINT FOR THE EXTRACTION WELLS
- NA — GROUNDWATER ELEVATION NOT AVAILABLE; SEE NOTE 3

NOTES:

1. 2MW-13 IS A COASTAL PLAIN/PERCHED GROUNDWATER MONITORING WELL.
2. GROUNDWATER ELEVATIONS FOR 2MW-8D AND 2MW-10D WERE NOT USED TO DEVELOP GROUNDWATER ELEVATION CONTOURS.
3. B-3 WAS TURNED OFF DURING THE WATER LEVEL GAUGING EVENT, AND A WATER LEVEL WAS NOT COLLECTED; THEREFORE A GROUNDWATER ELEVATION FOR B-3 IS NOT AVAILABLE.

0 150 300

SCALE IN FEET

TETRA TECH

2204275031A.DWG

FIGURE 8
APPROXIMATE EXTENT OF TCE IN GROUND WATER FROM MAY 2016 SAMPLING EVENT
FORMER APPLIANCE PARK EAST
COLUMBIA, MARYLAND

Parcel A-43

Parcel A-10

Parcel A-40

ASPHALT ROAD

SVE TREATMENT BUILDING

PARCEL A-10 PUMP AND TREAT REMEDIATION COMPOUND

PRESS PIT AREA (WEST WING)

PRESS PIT AREA (EAST WING)

RANGE BUILDING

NEW ADDITION

ODSR

ROBERT FULTON DRIVE

OBG-23 OBG-4 OBG-9 OBG-54 OBG-55 OBG-24 2TP-2 2TP-3 OBG-1 OBG-25 2TP-22 2TP-1 OBG-3 2MW-7 OBG-2 2MW-12 531 2MW-13 7.8 2TP-10 64,200 2TP-11 8,150 OGB-5 OGB-21 OGB-7 OGB-26 OGB-8 OGB-10 2TP-16 2TP-14 8.2 7TP-43 2MW-3 2TP-15 2TP-17 2MW-4 24.3 B-1 2TP-7 NR* 2TP-4 2MW-1 7TP-2 7TP-1 NSD B-6 OBG-26 2TP-5 NR* 2MW-8D NR* 2MW-8S 17,400 2TP-9 110 S-4 86.4 B-5 3.8 2MW-10D NR* S-1 B-2 2MW-5 14.3 B-4 2TP-18 HRD-1 1.1 S-3 <1.0 2MW-11 4.8 2TP-6 4.0 S-2 1.0 B-3 2TP-8 2.6 2MW-9 <1.0 2MW-6 <1.0 OGB-27 2TP-12 2TP-13 6.7 DM-1

0 150 300

SCALE IN FEET

LEGEND

EXISTING FEATURES

- SAPROLITE MONITORING WELL LOCATION
- BEDROCK MONITORING WELL LOCATION
- COASTAL PLAIN/PERCHED MONITORING WELL LOCATION
- B-1 BEDROCK EXTRACTION WELL LOCATION
- 22 TCE CONCENTRATION (ug/L) MAY 27, 2016
- <1.0 NOT DETECTED ABOVE LIMIT OF QUANTITATION (5.0)
- NR NOT REQUIRED TO BE SAMPLED FOR THIS SAMPLING EVENT
- NSD NOT SAMPLED DUE TO INSUFFICIENT VOLUME OF WATER IN WELL
- * WELL ON A BIENNIAL SAMPLING FREQUENCY (PREVIOUSLY SAMPLED IN MAY 2014); WILL BE SAMPLED IN NOVEMBER 2016

- ESTIMATED 5 ug/L LIMIT OF TCE IN SAPROLITE / SHALLOW BEDROCK GROUND WATR
- FRACTURE TRACE

TETRA TECH

22042750324.DWG

Figure 9
TCE Concentrations within Plume Core
Former Appliance Park East Facility
Columbia, Maryland

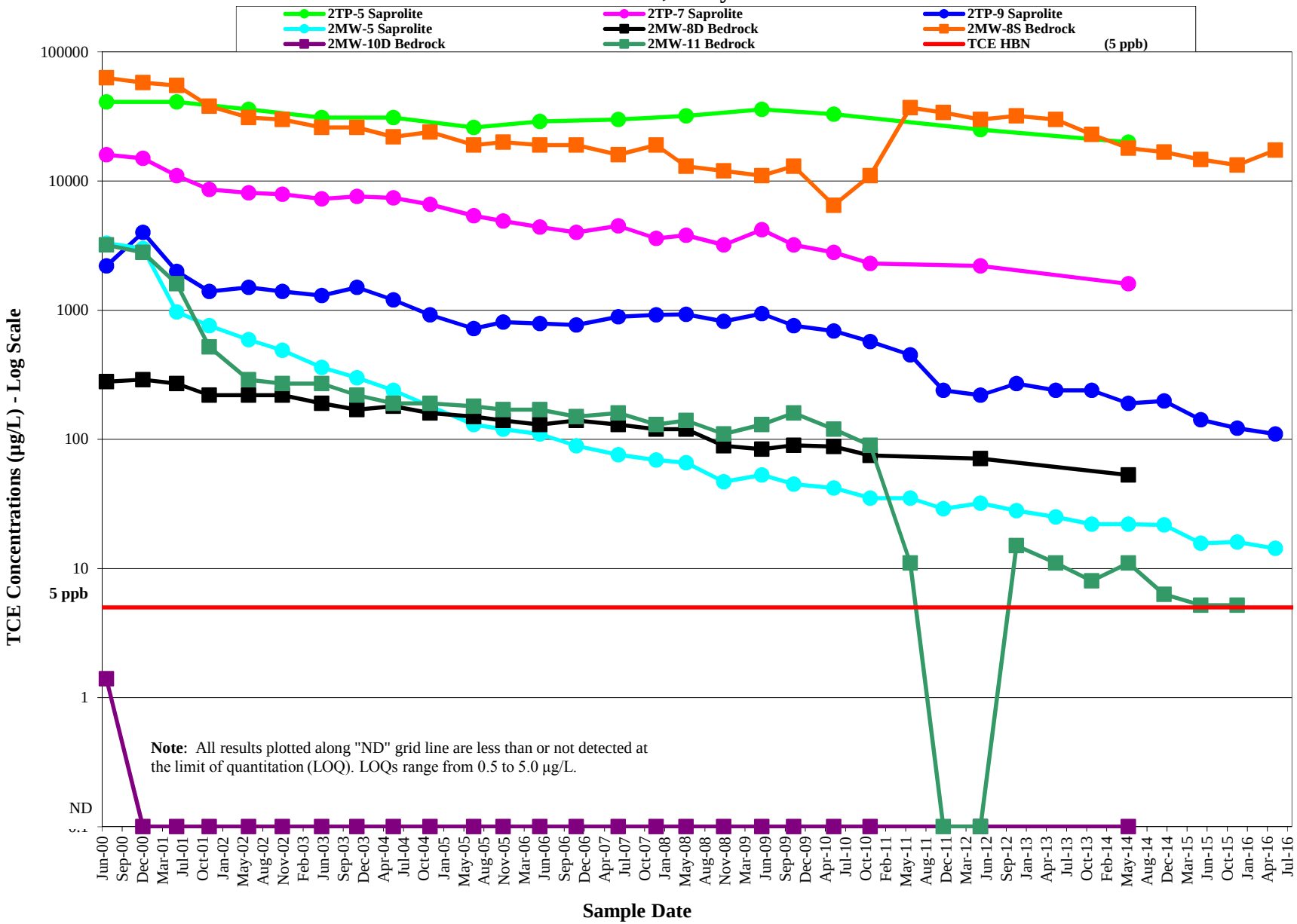


Figure 10
TCE Concentrations at Plume Toe and Cross-Gradient
Former Appliance Park East Facility
Columbia, Maryland

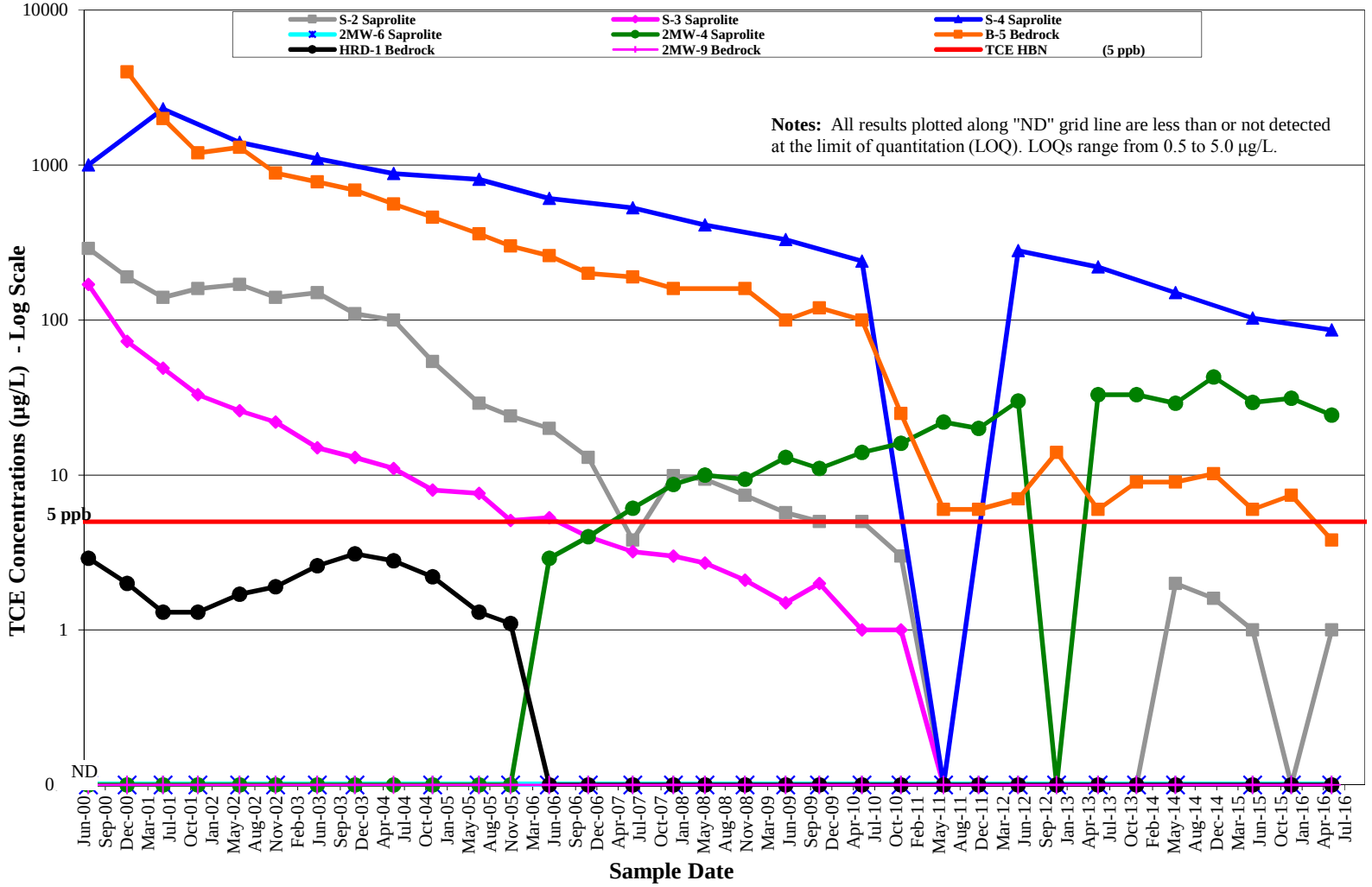


TABLE 1
Groundwater Elevations for Monitoring Wells at CMS Units 2 and 7
May 13, 2016
Former Appliance Park East Facility, Columbia, Maryland

Well ID	Interpreted Lithology	Reference Point Elevation (ft > MSL)	Well Depth (ft BGS)	Well Screen Length (ft)	Well Screen Top (ft BGS)	Well Screen Bottom (ft BGS)	Screen Top Elevation (ft > MSL)	Screen Bottom Elevation (ft > MSL)	Sampling Frequency**	Water Level Monitoring Frequency	Depth to Water on May 13, 2016 (ft BRE)	Groundwater Elevation on May 13, 2016 (ft > MSL)
SAPROLITE / WATER TABLE												
7TP-1	Saprolite	345.76	24	20	4	24	342	322	Annually	Semi-Annually	Dry	Dry
2TP-5	Saprolite	358.02	63	15	48	63	308.38	293.38	Biennially	Semi-Annually	53.65	304.37
2TP-6	Saprolite	358.79	50	15	35	50	321.41	306.41	Annually	Semi-Annually	45.23	313.56
2TP-7	Saprolite	358.76	59	15	44	59	313.16	298.16	Biennially	Semi-Annually	40.69	318.07
2TP-8	Saprolite	348.67	62	15	47	62	299.11	284.11	Annually	Semi-Annually	38.61	310.06
2TP-9	Saprolite	348.85	55	15	40	55	305.95	290.95	Semi-Annually	Semi-Annually	40.42	308.43
2TP-10	Coastal Plain & Saprolite	358.95	23	10	13	23	345	335	Annually	Semi-Annually	16.55	342.40
2TP-11	Coastal Plain & Saprolite	357.57	30	10	20	30	338	328	Annually	Semi-Annually	16.78	340.79
2TP-13	Saprolite	362.11	59	15	44	59	315.58	300.58	Annually	Semi-Annually	54.26	307.85
2TP-14	Saprolite	348.85	48	15	33	48	314.77	299.77	Annually	Semi-Annually	27.98	320.87
2TP-17	Saprolite	349.29	47	15	32	47	314.8	299.8	None	Semi-Annually	36.38	312.91
2TP-18	Saprolite	346.42	43	15	28	43	316.02	301.02	None	Semi-Annually	37.68	308.74
2MW-4	Saprolite	348.8	46	20	26	46	320.31	300.31	Semi-Annually	Semi-Annually	36.81	311.99
2MW-5	Saprolite	346.06	68	15	53	68	290.87	275.87	Semi-Annually	Semi-Annually	37.57	308.49
2MW-6	Saprolite	350.13	44	15	29	44	318.6	303.6	Semi-Annually	Semi-Annually	39.76	310.37
2MW-12	Saprolite	353.61	36	15.0	21.0	36.0	332.57	317.57	Annually	Semi-Annually	28.23	325.38
2MW-13	Coastal Plain/Perched	353.42	11	8	3	11	350.69	342.69	Annually	Semi-Annually	2.11	351.31
S-1	Saprolite	349.94	41	30	11	41	336.9	306.9	None	Semi-Annually	Dry	Dry
S-2	Saprolite	346.89	50	30	20	50	325.06	295.06	Semi-Annually	Semi-Annually	36.99	309.90
S-3	Saprolite	347.69	50	30	20	50	325.78	295.78	Semi-Annually	Semi-Annually	35.75	311.94
S-4	Saprolite	346.14	50	30	19	49	325.23	295.23	Annually	Semi-Annually	36.36	309.78
BEDROCK												
2MW-8S	Bedrock	359.24	128	20	108	128	248.8	228.8	Semi-Annually	Semi-Annually	54.82	304.42
2MW-9	Bedrock	349.45	93	20	73	93	274.47	254.47	Semi-Annually	Semi-Annually	38.50	310.95
2MW-11	Bedrock	345.54	120	20	100	120	243.61	223.61	Semi-Annually	Semi-Annually	35.27	310.27
2MW-8D	Bedrock	359.09	208	15	193	208	163.43	148.43	Biennially	Semi-Annually	43.24	315.85
2MW-10D	Bedrock	348.56	200	24	176	200	170.08	146.08	Biennially	Semi-Annually	30.78	317.78
HRD-1	Bedrock	341.11	140	20	120	140	221.11	201.11	Semi-Annually	Semi-Annually	27.89	313.22
B-5	Bedrock	345.99	140	86	54	140	290.08	204.08	Semi-Annually	Semi-Annually	36.17	309.82

NOTES:
BGS = below ground surface
BRE = below reference elevation
ft = feet
> MSL = above mean sea level
** Semi-annual frequency: May/June and November/December. Annual frequency: May/June. Biennial sampling: May/June of even years starting in 2012.
The low set points for the pump-and-treat system recovery (extraction) wells are: B-1: 300.97 ft MSL; B-2: 301.07 ft MSL; B-3: 306.43 ft MSL; B-4: 301.37 ft MSL; and B-6: 300.00 ft MSL.

TABLE 2
VOC Detections for CMS Units 2 and 7 Groundwater Monitoring
May 27, 2016
Former Appliance Park East Facility, Columbia, Maryland

Well - Sample ID	Trichloroethene (ug/L)	Cis-1,2-dichloroethene (ug/L)	Trans-1,2-dichloroethene (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	Tetrachloroethene (ug/L)	Chloroform (ug/L)	1,1,2-Trichloroethane (ug/L)	Vinyl Chloride (ug/L)
Saprolite / Water Table									
7TP-1	NSD	NSD	NSD	NSD	NSD	NSD	NSD	NSD	NSD
2TP-5*	NR	NR	NR	NR	NR	NR	NR	NR	NR
2TP-6	**4.0**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2TP-7*	NR	NR	NR	NR	NR	NR	NR	NR	NR
2TP-8	**2.6**	**1.1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2TP-9	**110**	**236**	**5.2**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2TP-10[CS]	**64,200**	**63.7**	**5.7**	**2.0**	**4.4**	**99.3**	**9.1**	**30.6**	<1.0
2TP-11[CS]	**8,150**	**21.1**	**2.9**	<1.0	**2.9**	**11.1**	**2.3**	**2.1**	<1.0
2TP-13	**6.7**	**2.2**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2TP-14	**8.2**	**40.0**	**2.3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2MW-4	**24.3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2MW-5	**14.3**	**5.7**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2MW-6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2MW-12	**531**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2MW-13[CP]	**7.8**	**7.8**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
S-2	**1.0**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
S-3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
S-4	**86.4**	**52.2**	**1.1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bedrock									
2MW-8S	**17,400 / 13,300**	**805 / 618**	**11.2 / 9.8**	**5.6 / 4.7**	**10.6 / 9.2**	**3.4 / 3.9**	<1.0	<1.0	**3.6 / 3.5**
2MW-9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2MW-11	**4.8**	**35.2**	**1.9**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2MW-8D*	NR	NR	NR	NR	NR	NR	NR	NR	NR
2MW-10D*	NR	NR	NR	NR	NR	NR	NR	NR	NR
HRD-1	**1.1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
B-5	**3.8**	**33.0**	**1.5**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Field Blank	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

NOTES:

ug/L = Micrograms per liter

/ = Duplicate samples

NR = well not sampled - not required for this sampling event

NSD = Not sampled due to well being dry or had insufficient volume of water

Starting in November 2009 samples analyzed using EPA Method 8260

MW-12, MW-13, 2TP-10, and 2TP-11 added to semi-annual sampling in June 2011

< = result is less than or not detected at this limit of quantitation

[CS] Costal Plain & Saprolite

[CP] Coastal Plain/Perched Well

* Well on a biennial sampling frequency; will be sampled in November 2016.

TABLE 3
Historical TCE Analytical Results for CMS Units 2 and 7 Groundwater Monitoring
Former Appliance Park East Facility, Columbia, Maryland

Well - Sample ID	Well Depth (ft BGS)	Well Screen (ft BGS) Top (ft BGS)	Well Screen (ft BGS) Bottom (ft BGS)	6/14/2007 TCE (ug/L)	12/20/2007 TCE (ug/L)	1/2008 TCE (ug/L)	5/16/2008 TCE (ug/L)	11/20/2008 TCE (ug/L)	5/29/2009 TCE (ug/L)	11/3/2009 TCE (ug/L)	5/21/2010 TCE (ug/L)	11/19/2010 TCE (ug/L)	6/6/2011 TCE (ug/L)	11/18/2011 TCE (ug/L)
Saprolite / Water Table														
7TP-1	24	4.0	24.0	NC	NC	NC	NC	NC	NC	NC	NC	NC	NSD	NR
2TP-5*	63.0	48.0	63.0	30,000	NR	NC	32,000	NR	36,000	NR	33,000	NR	NR	NR
2TP-6	50.0	35.0	50.0	NSD	<2.0	NC	NSD	NSD	NSD	NSD	NSD	<1.0	NSD	NR
2TP-7*	59.0	44.0	59.0	4,500	3,600	NC	3,800	3,200	4,200	3,200	2,800	2,300	NR	NR
2TP-8	62.0	47.0	62.0	<2.0	<2.0	NC	<2.0	<0.5	<0.5	<1.0	<1.0	<1.0	<5.0	NR
2TP-9	55.0	40.0	55.0	890	920	NC	930	820	940	760	690	570	450	240
2TP-10[CS]	21.9	13.0	23.0	NC	50,000	NC	NC	NC	NC	NC	NC	NC	68,000	NR
2TP-11[CS]	30.0	19.2	30.0	NC	3,200	NC	NC	NC	NC	NC	NC	NC	5,400	NR
2TP-13	59.0	44.0	59.0	<2.0	<2.0	NC	<2.0	0.7	0.5	<1.0	<1.0	<1.0	7.0	NR
2TP-14	58.0	43.0	58.0	5.4	4.6	NC	4.4	3.6	3.1	2.0 J	3.0 J	4.0 J	<5.0	NR
2MW-4	46.0	26.0	46.0	6.1	8.7	NC	10.0	9.4	13.0	11.0	14.0	16	22/22	20
2MW-5	68.0	53.0	68.0	76	69	NC	66	47	53	45	42	35	35	29
2MW-6	44.0	29.0	44.0	<2.0	<2.0	NC	<2.0	<0.5	<0.5	<1.0	<1.0	<1.0	<5.0	<5.0
2MW-12	34.9	19.9	34.9	NA	NC	890	NC	NC	NC	NC	NC	NC	1,900	NR
2MW-13[CP]	11.0	3.0	11.0	NA	NC	8.1	NC	NC	NC	NC	NC	NC	21	NR
S-2	50.0	20.0	50.0	4	10	NC	9	7	6	5.0 J	5.0 J	3.0 J	<5.0	<5.0
S-3	50.0	20.0	50.0	3.2	3.0	NC	2.7	2.1	1.5	2.0 J	1.0 J	1.0 J	<5.0	<5.0
S-4	50.0	20.0	50.0	530	NR	NC	410	NR	330	NR	240	NR	<5.0	NR
Bedrock														
2MW-8S	128.0	108.0	128.0	16,000	19,000	NC	13,000	12,000	11,000	13,000	6,500	11,000	37,000	34,000/33,000
2MW-9	93.0	73.0	93.0	<2.0	<2.0	NC	<2.0	<0.5	<0.5	<1.0	<1.0	<1.0	<5.0	<5.0
2MW-11	120.0	100.0	120.0	160	130	NC	140	110	130	160	120	90	11	<5.0
2MW-8D*	208.0	193.0	208.0	130	120	NC	120	89	84	90	88	75	NR	NR
2MW-10D*	200.0	176.0	200.0	<2.0	<2.0	NC	<2.0	<0.5	<0.5	<1.0	<1.0	<1.0	NR	NR
HRD-1	140.0	120.0	140.0	<2.0	<2.0	NC	<2.0	<0.5	<0.5	<1.0	<1.0	<1.0	<5.0	<5.0
B-5	140.0	54.0	140.0	190	160	NC	NS	160 E	100	120	100	25	6	6
Field Blank	-	-	-	<2.0	<2.0	NC	<2.0	<0.5	<0.5	<1.0	<1.0	<1.0	<5.0	<5.0

NOTES:

ug/L = Micrograms per liter
BGS = Below ground surface
[CS] Costal Plain & Saprolite
[CP] Coastal Plain/Perched Well
/ = Duplicate samples
TCE = Trichloroethene

NC = Not collected
NA = Not avaliable
NR = Not required for this sampling event
NS = Not sampled unable to retrieve passive bag sampler
NSD = Not sampled due to insufficient volume of water in well
< = result is less than or not detected at this limit of quantitation
MW-12, MW-13, 2TP-10, and 2TP-11 added to semi-annual sampling in June 2011
Starting in November 2009 samples analyzed using EPA Method 8260

* Well on a biennial sampling frequency; will be sampled in November 2016.

TABLE 3
Historical TCE Analytical Results for CMS Units 2 and 7 Groundwater Monitoring
Former Appliance Park East Facility, Columbia, Maryland

Well - Sample ID	Well Depth (ft BGS)	Well Screen (ft BGS) Top (ft BGS)	Well Screen (ft BGS) Bottom (ft BGS)	5/21/2012 TCE (ug/L)	11/16/2012 TCE (ug/L)	5/30/2013 TCE (ug/L)	11/25/2013 TCE (ug/L)	5/27/2014 TCE (ug/L)	11/21/2014 TCE (ug/L)	5/22/2015 TCE (ug/L)	11/20/2015 TCE (ug/L)	5/27/2016 TCE (ug/L)
Saprolite / Water Table												
7TP-1	24	4.0	24.0	NSD	NR	NSD	NR	NSD	NR	NSD	NR	NSD
2TP-5*	63.0	48.0	63.0	25,000	NR	NR	NR	20,000	NR	NR	NR	NR
2TP-6	50.0	35.0	50.0	NSD	NR	NSD	NR	NSD	NR	<1.0	NR	4.0
2TP-7*	59.0	44.0	59.0	2,200	NR	NR	NR	1,600	NR	NR	NR	NR
2TP-8	62.0	47.0	62.0	<5.0	NR	<5.0	NR	<5.0	NR	<1.0	NR	2.6
2TP-9	55.0	40.0	55.0	220	270	240	240	190	198	142	122	110
2TP-10[CS]	21.9	13.0	23.0	58,000	NR	53,000	NR	54,000	NR	55,300	NR	64,200
2TP-11[CS]	30.0	19.2	30.0	7,800	NR	6,400	NR	7,000	NR	7,240	NR	8,150
2TP-13	59.0	44.0	59.0	10	NR	10	NR	9	NR	8.9	NR	6.7
2TP-14	58.0	43.0	58.0	<5.0	NR	<5.0	NR	<5.0	NR	5.7	NR	8.2
2MW-4	46.0	26.0	46.0	30	<5.0	33	33	29	33	29.4	31.3	24.3
2MW-5	68.0	53.0	68.0	32	28	25	22	22	21.7	15.7	16	14.3
2MW-6	44.0	29.0	44.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0
2MW-12	34.9	19.9	34.9	2,000	NR	1,200	NR	1,000	NR	292	NR	531
2MW-13[CP]	11.0	3.0	11.0	9	NR	13	NR	11	NR	11.8	NR	7.8
S-2	50.0	20.0	50.0	<5.0	<5.0	<5.0	<5.0	<5.0	1.6	1.0	<1.0	1.0
S-3	50.0	20.0	50.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0
S-4	50.0	20.0	50.0	280	NR	220	NR	150	NR	103	NR	86.4
Bedrock												
2MW-8S	128.0	108.0	128.0	29,000/30,000	30,000/32,000	28,000/30,000	23,000/23,000	18,000/18,000	14,700/16,800	14,700/13,600	13,300 / 13,300	17,400 / 13,300
2MW-9	93.0	73.0	93.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0
2MW-11	120.0	100.0	120.0	<5.0	15	11	8	11	6.3	5.2	5.2	4.8
2MW-8D*	208.0	193.0	208.0	71	NR	NR	NR	53	NR	NR	NR	NR
2MW-10D*	200.0	176.0	200.0	<5.0	NR	NR	NR	<5.0	NR	NR	NR	NR
HRD-1	140.0	120.0	140.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	1.1
B-5	140.0	54.0	140.0	7	14	6	9	9	10.2	6	7.4	3.8
Field Blank	-	-	-	<5.0	<5.0	<5.0	<5.0	<5.0	1.0	<1.0	<1.0	<1.0

NOTES:

ug/L = Micrograms per liter
BGS = Below ground surface
[CS] Costal Plain & Saprolite
[CP] Coastal Plain/Perched Well
/ = Duplicate samples
TCE = Trichloroethene

NC = Not collected
NA = Not avaliable
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NSD = Not sampled due to insufficient volume of water in well
< = result is less than or not detected at this limit of quantitation
MW-12, MW-13, 2TP-10, and 2TP-11 added to semi-annual sampling in June 2011
Starting in November 2009 samples analyzed using EPA Method 8260

* Well on a biennial sampling frequency; will be sampled in November 2016.

ATTACHMENT 3

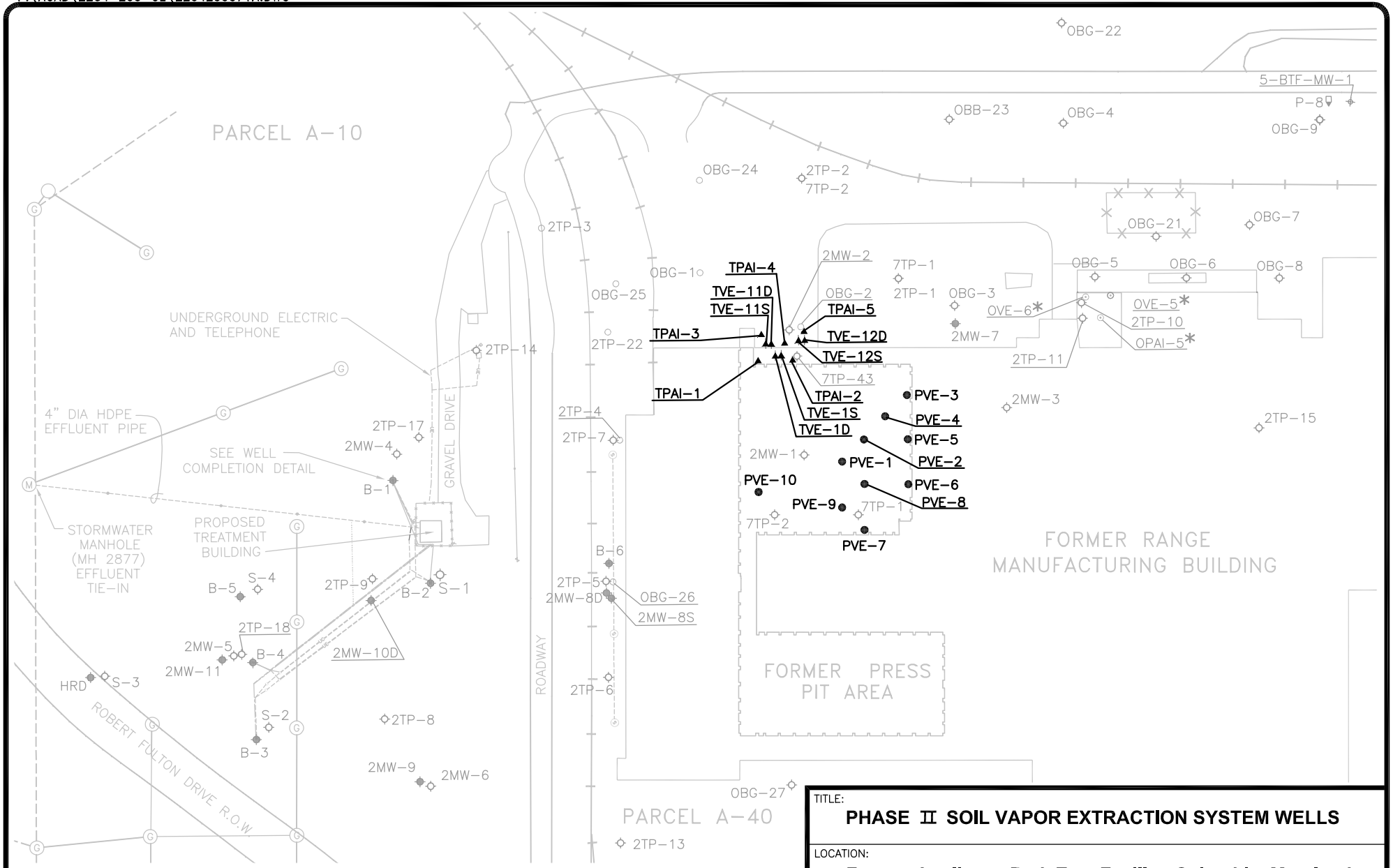
To Semi-Annual Project Progress Report
RCRA Corrective Action Permit
No. MDD046279311

General Electric Co.
Former Appliance Park East Facility
Columbia, MD

Period 1 January 2016 to 30 June 2016

Findings Summary for the Phase II SVE System at RFI Units 2 and 7

P:\ACAD\2204-200-GE\2204200071A.DWG



0 150 300

SCALE IN FEET

LEGEND

* WELLS DECOMMISSIONED ON 12-20-2001.

TITLE:

PHASE II SOIL VAPOR EXTRACTION SYSTEM WELLS

LOCATION:

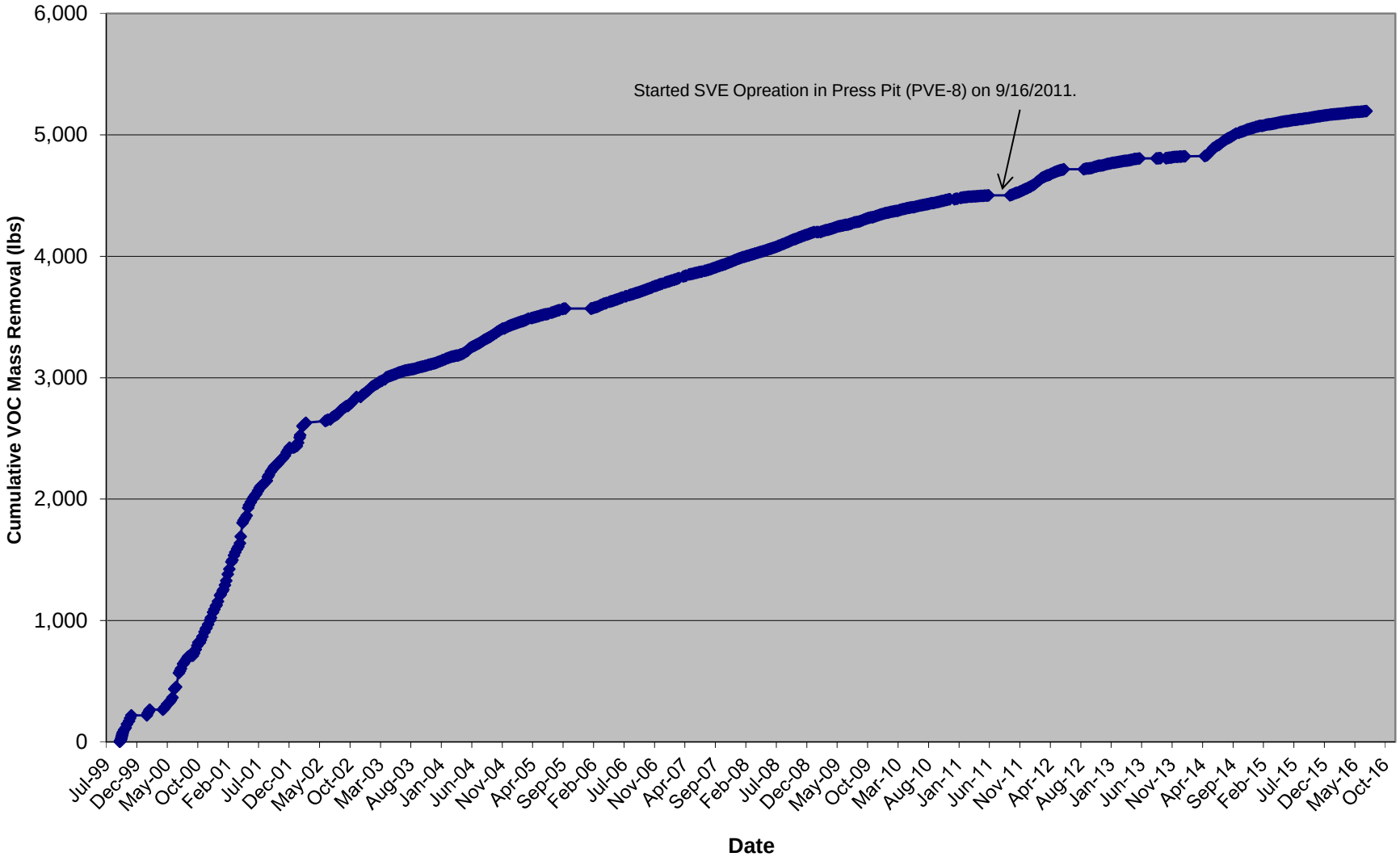
Former Appliance Park East Facility, Columbia, Maryland

TETRA TECH GEO

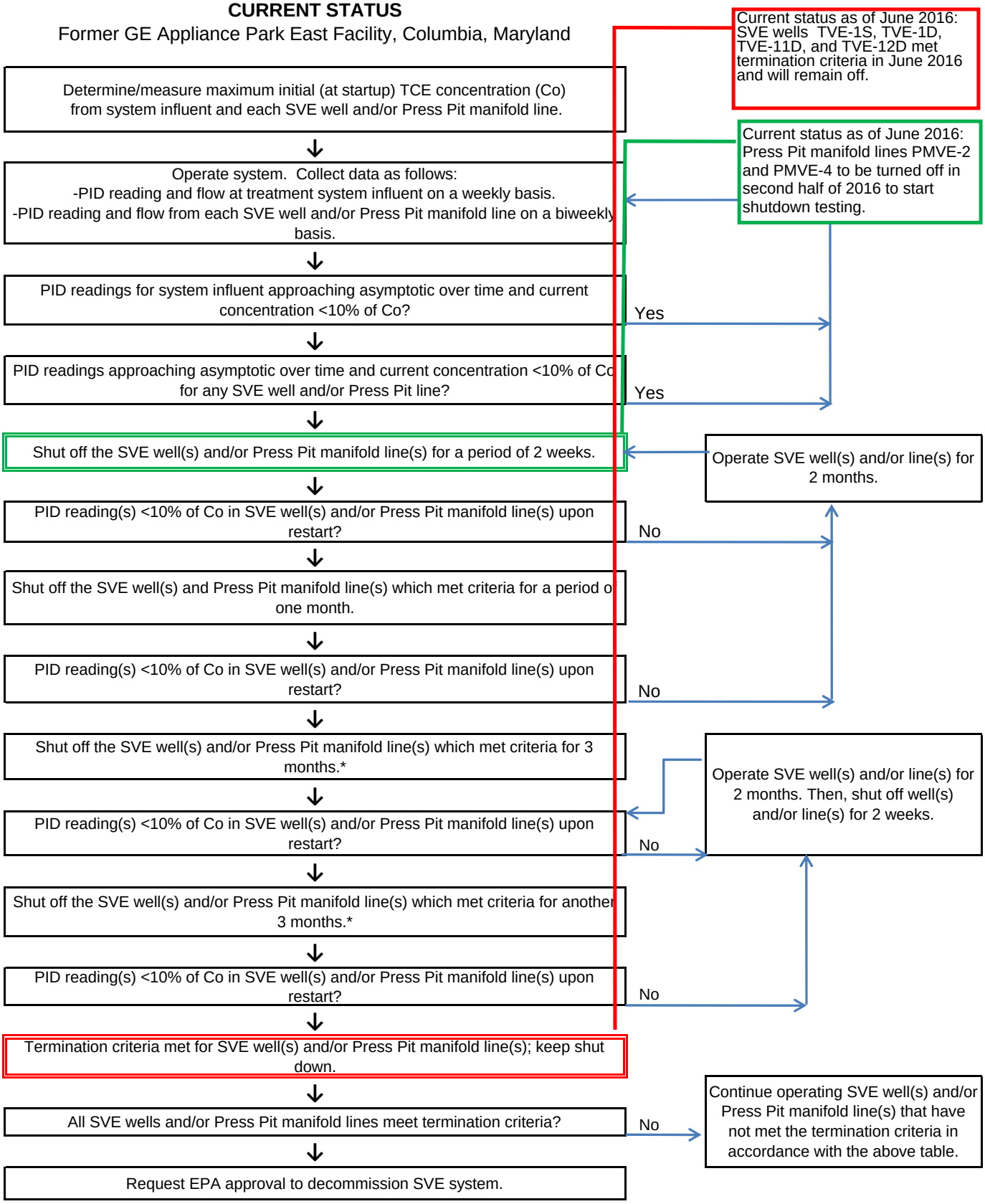
APPROVED	BC
DRAFTED	CP
PROJECT#	117-2204200
DATE	8-25-11

FIGURE 1

Phase II Soil Vapor Extraction System VOC Mass Removal
Former Appliance Park East Facility, Columbia, Maryland



Phase II Soil Vapor Extraction System Termination Criteria
CURRENT STATUS
Former GE Appliance Park East Facility, Columbia, Maryland



ATTACHMENT 4

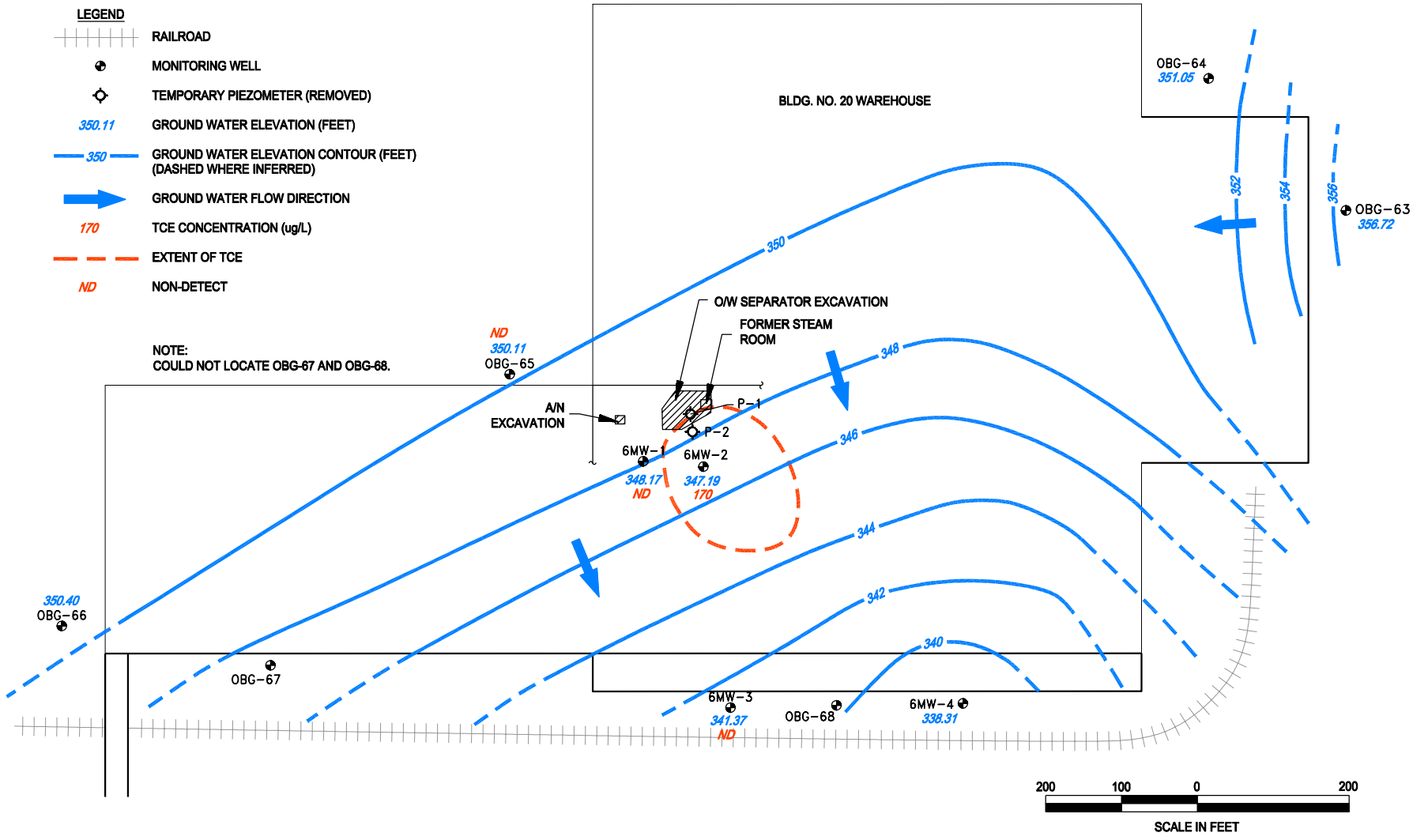
To Semi-Annual Project Progress Report
RCRA Corrective Action Permit
No. MDD046279311

General Electric Co.
Former Appliance Park East Facility
Columbia, MD

Period 1 January 2016 to 30 June 2016

Findings Summary for
Warehouse Building Oil/Water Separator and
Acid Neutralization Units
RFI Unit 6

FIGURE 1
GROUND WATER ELEVATION CONTOUR MAP
29 NOVEMBER 2012
RFI UNIT #6
GE - FORMER APPLIANCE PARK EAST
COLUMBIA, MARYLAND



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MLB/1-16-13

ERM, INC.

Table 1 Summary of Ground Water Elevations
RFI Unit 6
Former Appliance Park East, Columbia, Maryland

Date		17-Oct-94*		17-Jan-95*		18-Apr-95*		18-Jul-95*		16-May-02		14-Nov-07		29-Nov-12	
Well ID	Reference Elevation Feet, MSL	Depth to Water	Ground Water Elevation Feet, MSL	Depth to Water	Ground Water Elevation Feet, MSL	Depth to Water	Ground Water Elevation Feet, MSL	Depth to Water	Ground Water Elevation Feet, MSL	Depth to Water	Ground Water Elevation Feet, MSL	Depth to Water	Ground Water Elevation Feet, MSL	Depth to Water	Ground Water Elevation Feet, MSL
6MW-1	359.70	10.99	348.71	11.41	348.29	11.37	348.33	11.05	348.65	12.69	347.01	12.08	347.62	11.53	348.17
6MW-2	359.49	11.58	347.91	12.04	347.45	11.93	347.56	11.55	347.94	13.42	346.07	12.68	346.81	12.30	347.19
6MW-3	355.21	11.91	343.30	12.00	343.21	12.17	343.04	11.77	343.44	17.14	338.07	14.76	340.45	13.84	341.37
6MW-4	355.17	10.81	344.36	10.52	344.65	NM	--	10.59	344.58	15.83	339.34	16.55	338.62	16.86	338.31
OBG-63	361.58	9.61	351.97	8.33	353.25	9.22	352.36	9.35	352.23	5.60	355.98	5.61	355.97	4.86	356.72
OBG-64	362.40	11.33	351.07	10.52	351.88	11.01	351.39	11.00	351.40	11.51	350.89	11.99	350.41	11.35	351.05
OBG-65	362.61	11.97	350.64	11.83	350.78	12.30	350.31	12.12	350.49	13.33	349.28	13.41	349.20	12.50	350.11
OBG-66	361.99	11.81	350.18	12.57	349.42	12.42	349.57	11.95	350.04	13.54	348.45	13.37	348.62	11.59	350.40
OBG-67	355.05	5.44	349.61	5.55	349.50	5.38	349.67	4.36	350.69	6.69	348.36	NM	--	NM	--
OBG-68	355.54	12.05	343.49	12.27	343.27	12.50	343.04	11.93	343.61	NM	--	NM	--	NM	--

Notes:
* - Data presented in *Addendum to the RCRA Facility Investigation Report for RFI Unit 6,* dated 2 August 1995
Reference elevation for all wells is top of PVC casing
MSL - Mean Sea Level
NM - Not measured, well was inaccessible

Table 2 Detected Analytes for Ground Water Samples
RFI Unit 6
Former Appliance Park East, Columbia, Maryland

Sample Number			6-MW-1				6-MW-2				6-MW-3				6-MW-4		OBG-65				OBG-67	OBG-68
Sample Collection Date			8/22/94*	5/16/2002	11/14/2007	11/29/2012	8/23/94*	5/16/2002	11/14/2007	11/29/2012	8/23/94*	5/16/2002	11/14/2007	11/29/2012	8/23/94*	5/16/2002	8/22/94*	5/16/2002	11/14/2007	11/29/2012	8/23/94*	8/23/94*
Analyte	**HBN**	**PQL**																				
Field Parameters																						
pH (standard units)	--	--	6.9	6.4	5.9	6.3	6.3	6.2	6.7	6.0	6	6.6	6.8	6.7	5.4	6.2	6.2	6.4	6.2	6.0	6.8	6.7
Conductivity (mS/cm)	--	--	NA	0.169	0.238	0.116	NA	0.203	0.660	0.079	NA	0.771	0.616	0.298	NA	0.908	NA	0.213	0.315	0.090	NA	NA
Temperature (^{o}C)	--	--	NA	19.8	17.4	19.1	NA	19.7	16.5	19.5	NA	16.7	16.6	17.7	NA	16.5	NA	15.9	15.7	16.1	NA	NA
D.O. (mg/L)	--	--	NA	2.83	NA	NA	NA	0.84	NA	NA	NA	2.21	NA	NA	NA	4.59	NA	4.63	NA	NA	NA	NA
Permit List 4 Volatiles (µg/L)																						
1,1-Dichloroethene	7	5	--	< 5	< 5	< 5	--	30	56	85	--	< 5	< 5	< 5	--	< 5	--	< 5	< 5	< 5	--	--
cis-1,2-Dichloroethene	--	5	NA	< 5	< 5	< 5	NA	82	89	97	NA	< 5	< 5	< 5	NA	< 5	NA	< 5	< 5	< 5	NA	NA
1,2-Dichloroethene (total)	100	5	--	NA	NA	NA	11	NA	NA	NA	--	NA	NA	NA	--	NA	--	NA	NA	NA	--	--
Trichloroethene	5	5	--	< 5	< 5	< 5	24	110	130	170	--	< 5	< 5	< 5	--	< 5	--	< 5	< 5	< 5	--	--
Benzene	5	5	--	< 5	< 5	< 5	2 J	< 5	< 5	< 5	--	< 5	< 5	< 5	--	< 5	--	< 5	< 5	< 5	--	--
Tetrachloroethene	5	5	--	< 5	< 5	< 5	--	6	18	44	--	< 5	< 5	< 5	--	< 5	--	< 5	< 5	< 5	--	--
Inorganic Parameters (µg/L)																						
Antimony	10	30	--	< 5	NA	NA	--	< 5	NA	NA	--	< 5	NA	NA	--	< 5	--	< 5	NA	NA	2.3	--
Chromium	100	10	2.2 J	< 3	NA	NA	0.44 J	< 3	NA	NA	--	< 3	NA	NA	2 J	< 3	--	< 3	NA	NA	7.9	3.8 B

Notes:
mg/L - milligrams per liter
µg/L - micrograms per liter
HBN - Health Based Number
PQL - Practical Quantitation Limit
* - Data presented in *RCRA Facility Investigation Report for RFI Unit 6,* dated 3 March 1995
< 5 - Analyte not detected, value indicates detection limit
-- - Not detected.
NA - Not analyzed
J - Analyte present, result may not be accurate or precise
B - Not detected substantially above the level reported in laboratory or field blanks
d - Sample is a duplicate of 6MW-2

Table 2 (cont.) Detected Analytes for Ground Water Samples
RFI Unit 6
Former Appliance Park East, Columbia, Maryland

Sample Number			6-MW-100[d]		6-MW-20[d]	6-MW-5[d]		6-FB-1		6-EB-1		6-TB-1		TB-1	
Sample Collection Date			8/23/94*		5/16/2002	11/14/2007	11/29/2012	8/22/94*	5/16/2002	8/22/94*	5/16/2002	8/23/94*	5/16/2002	11/14/2007	11/29/2012
Analyte	**HBN**	**PQL**													
Field Parameters															
pH (standard units)	--	--	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Conductivity (mS/cm)	--	--	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Temperature (^{0}C)	--	--	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D.O. (mg/L)	--	--	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Permit List 4 Volatiles (µg/L)															
1,1-Dichloroethene	7	5	--		30	57	84	--	< 5	--	< 5	--	< 5	< 5	< 5
cis-1,2-Dichloroethene	--	5	NA		83	95	96	NA	< 5	NA	< 5	NA	< 5	< 5	< 5
1,2-Dichloroethene (total)	100	5	10		NA	NA	NA	--	NA	--	NA	--	NA	NA	NA
Trichloroethene	5	5	23		110	130	170	--	< 5	--	< 5	--	< 5	< 5	< 5
Benzene	5	5	2	J	< 5	< 5	< 5	--	< 5	--	< 5	--	< 5	< 5	< 5
Tetrachloroethene	5	5	--		6	17	45	--	< 5	--	< 5	--	< 5	< 5	< 5
Inorganic Parameters (µg/L)															
Antimony	10	30	--		< 5	NA	NA	--	< 5	--	< 5	--	< 5	NA	NA
Chromium	100	10	--		< 3	NA	NA	1	< 3	--	< 3	--	< 3	NA	NA

Notes:
mg/L - milligrams per liter
µg/L - micrograms per liter
HBN - Health Based Number
PQL - Practical Quantitation Limit
* - Data presented in *RCRA Facility Investigation Report for RFI Unit 6,* dated 3 March 1995
< 5 - Analyte not detected, value indicates detection limit
-- - Not detected, detection limit not available
NA - Not analyzed
J - Analyte present, result may not be accurate or precise
B - Not detected substantially above the level reported in laboratory or field blanks
d - Sample is a duplicate of 6MW-2